



Safety Engineering

WARPAINT ISSUE 33

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Defence Equipment & Support

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The information on acceptable paint systems/coatings, given in this publication, updates BR3939 Issue 1 September 2006.

1. INTRODUCTION

- 1.1 Warpaint is the DES SE Sea-MT main guidance document of acceptable paint coatings for in-service and new-build Royal Naval Vessels. However, not all approved coatings are necessarily listed in Warpaint as paint manufacturers' are constantly striving to improve their current paint systems. Consequently their Whole Ship Specifications/Annexes are regularly updated. Should a coating therefore be proposed which is not listed in the current issue of Warpaint, confirmation of acceptance must be obtained from DES SE Sea-MT5.
- 1.2 Note that all paint coatings listed in the annexes are to be applied strictly in accordance with their respective paint manufacturers' technical, health & safety data sheets and/or instructions.
- 1.3 The differing paint manufacturers 'Whole Ship Specification' annexes are listed in alphabetical order (Leighs previously known as WJ Leighs) and it is important to first determine your current paint supplier before ordering *any* specific coating. For example; there have been numerous instances where coatings manufactured by Chugoku Paints (UK) Ltd have been ordered incorrectly, simply because they are listed first (alphabetically) in the annexes.
- 1.4 Due to the high demand for Warpaint, hard copies are no longer available. The easiest way to obtain an e-copy is via the internet or intranet and the DE&S Sea Systems Group website. From here it can be easily downloaded. Information on accessing these websites is detailed at 1.8 and 1.8.1
- 1.5 The main aim of Warpaint is to continue to offer guidance on the various approved commercial off the shelf (COTS) paint manufacturers' coatings that have been assessed for their health and safety, fire and toxicity and suitability when applied to various areas of Royal Naval Vessels.
- 1.6 **The DES SE Sea-MT contract with Coating Consultants Limited (CCL), for the support of a telephone Paint Helpline has unfortunately not been renewed. This is a consequence of changes within the MOD contract enabling arrangements.**
- 1.7 This issue should be a useful addition to the data required by projects for ship/submarine build or maintenance. For future editions of Warpaint readers are invited to comment on what they regard as errors, omissions or where they feel that more, or possibly less information is required. Please note that such comments should be emailed for *consideration* to: DESSESea-MT5@mod.uk with the subject heading "WARPAINT".

1.8 Warpaint is available via the DE&S *internet* website at:

<http://www.mod.uk/DefenceInternet/MicroSite/DES/OurPublications/Warpaint.htm>

1.8.1 It is also available via the DE&S *intranet* at:

<http://defenceintranet.diiweb.r.mil.uk/DefenceIntranet/Library/CivilianAndJointService/BrowseDocumentCategories/ResearchScienceAndTechnology/MaterialsScienceAndTechnology/CoatingsColourantsAndFinishes/Warpaint.htm>

1.8.2 Extracts from Warpaint, relative to areas of ship husbandry, can also now be found on the 'Ship / Submarine Husbandry & Habitability Information Portal' via the internet at: www.shipshapern.com along with a full copy and the current issue (1) of BR3939. To gain access to this database you will require a user name and log in available by emailing your request and details to: DESSESea-ShipDes2a@mod.uk

1.9 Requests for Warpaint should be emailed to the DES SE Sea-MT5 e-address at 1.7 above and not to CCL.

2. AMMENDMENTS TO ISSUE 32

2.1 Page 1; should read Annexe B - Hempel UK Ltd

2.2 Page 6, 5.4.2; should read Hempel UK Ltd

2.3 Page 11, 6.3; the telephone number of H Marcel Guest should read 0161 2057631

2.4 Annexe C, Section Z; Interfine 925 should read Interline 925

3. VOC COMPLIANT COATING SYSTEMS

3.1 EU Legislation has changed the way VOC emissions are recorded. Notwithstanding this, there remains a MOD requirement for low VOC materials. Based on the guidance table below, Paint Manufacturers and Suppliers are reminded that any formulation changes to their existing products must be advised to DES SE Sea-MT5. They will then be required on request, to provide the Institute of Naval Medicine (INM), with full product formulation data. Failure to do so will automatically result in the withdrawal of MOD (N) acceptance

3.2 MOD (N) requires that Paint Manufacturers and Suppliers quote VOC levels in accordance with CEN or ISO Standards

3.3 The DES SE Sea-MT5 maximum VOC target levels are shown in the following table and both paint manufacturers and applicators are encouraged to propose/apply coatings which at least meet or are lower than these target levels.

| Category No | Category | VOC limit gms/litre, Paint less Water |
|-------------|---|---|
| (i) | Blast/Weldable primer* | 600 |
| (ii) | Tie-coats/sealers | 550 |
| (iii) | General primer/undercoat | 200 |
| (iv) | External Finishes | 420 |
| (v) | Internal Finishes | 200 |
| (vi) | AFFF Tanks | 390 |
| (vii) | Demineralised Water Tanks | 390 |
| (viii) | AVCAT, Dieso & Hydraulic Oil Tanks | 390 |
| (ix) | All other tank coating systems, plus cofferdams, engine room bilges and chain lockers | 300 |
| (x) | Marine Varnish | 530 |

* Blast primers are materials that are applied to a specified thickness of 40 microns. Weldable primers are shop-primers applied by automatic spray and the maximum specified thickness for these materials is 25 microns.

New-generation anti-fouling systems may have higher VOC values than currently existing. There must be a balance between VOC level and toxic content and it may prove necessary to accept a higher VOC material as the lower toxic content outweighs the release of VOC.

3.4 For the benefit of New-Building Specifications ONLY, if a paint system can offer cost benefits but one part of it has a VOC level higher than the DES SE Sea-MT5 target value, the actual VOC value must be equal to or less than the stated value in PG6/23. This part of the scheme could be proposed on the assumption that it will be subsequently submitted to DES SE Sea-MT5 for approval and inclusion in Warpaint. In this instance DES SE Sea-MT5 will require data supporting the case, including a statement that the total VOCs' to be given off to the atmosphere during application, will be equal to or less than when applying a paint scheme fully in accordance with the DES SE Sea-MT5 target values.

4. SUBMARINE SPECIFICATIONS

4.1 All extant *technical* information previously found within Defence Standard 07-252 (NES 774) – Requirements for the Preparation and Painting of Submarines, has now been incorporated into BR3939 – Hull Preservation Processes (Issue 1 September 2006). The previous and now updated references to approved paint coatings can be found in Annexe J of Warpaint.

4.2 Acceptable paint systems are outlined in Annexe J, together with a list of other acceptable materials.

- 4.3 In previous issues reference has been made to BR1326(A) Classification, now commonly referred to as the 'Submarine Material Toxicity Database'. DES SE Sea-SM-Atm1 is the sponsor of the hazard assessment process in line with the requirements set for submarine atmosphere control – This process is documented in BR1326 chapter 6. DES SE Sea-SM-Atm1 has the responsibility for assessing materials for internal submarine use. All enquiries regarding materials for use on board should therefore in the first instance be directed to DESSESea-SM-Atm1@mod.uk at MOD Abbey Wood South, Bristol. Telephone: 030679 35045.
- 4.4 Once a material toxicity hazard assessment has been conducted, clearance for use must be sought from DESSMIS-A-WS2a1@mod.uk Telephone: 030679 39170 prior to product embarkation.

5. WHOLE SHIP SPECIFICATIONS

- 5.1 The Whole Ship Specifications submitted by seven major paint manufacturers/suppliers, are detailed in their respective annexes to this document. New build paint specifications are no longer separately included as they so closely mirror refit, maintenance and repair.
- 5.1.1 The various paint manufacturers' annexes were originally inserted into Warpaint in alphabetical order, with Chugoku Paints (UK) Ltd being listed first. It is important when searching for any particular coating or paint system, to ensure that the correct paint manufacturer is sourced and not to just turn to the first annexe (i.e. Chugoku) for convenience.
- 5.1.2 The paint specifications in the annexes are the recommendations of the respective paint manufacturers. They are based on performance requirements, VOC and health and safety criteria of MOD(N). They are not specifications prescribed by MOD(N) and their fitness for purpose remains the responsibility of the paint manufacturer.
- 5.2 Items in the tables highlighted with a grey band do not fully meet MOD(N) criteria and are not to be used without prior confirmation from DES SE Sea-MT5. A number of these items may have obtained approval prior to the next issue of Warpaint and readers should always check their current approval status.
- 5.3 In previous Whole Ship Annexes listed under item J, the NSNs 99-225-0889 & 99-772-5449 shown, relate to Defence Standards' 80-165 (weatherwork grey undercoat) and 80-187 (weatherwork grey finish). To ensure that vessels allocated under the Whole Ship Specification concept receive paints from the selected supplier, their specific materials have been re-codified.
- 5.4 Tables
- 5.4.1 These are in a new format and now include nominal dry film thickness (ndft) per coat in microns, as well as both the minimum and maximum recoat intervals. The figures quoted are meant for guidance only.

5.4.2 VOC grams per litre in the table highlighted thus in a box; no longer comply with DES SE Sea-MT5 VOC emission target levels.

5.4.3 Items with a '?' appearing in the boxes, indicate that manufacturer/supplier information is awaited.

5.4.4 Annexes are listed in alphabetical order (Leighs previously WJ Leighs) as follows:

| | |
|----------------------------------|----------|
| Chugoku Paints (UK) Ltd | Annexe A |
| Hempel UK Ltd | Annexe B |
| International Paint Ltd | Annexe C |
| Jotun Paints (Europe) Ltd | Annexe D |
| Makers Coating Systems Ltd | Annexe E |
| PPG Protective & Marine Coatings | Annexe F |
| Leighs Paints | Annexe G |

5.5 LCUs and LCVPs

5.5.1 In general LCUs and LCVPs follow the Whole Ship Specifications with the exception of weatherwork coatings where Chemical Agent Resistant Coatings (CARC) and Infra Red Resistant coatings (IRR) are specified

6. SPECIALIST COATINGS & PAINT REMOVERS

6.1 "WHOLE SHIP SPECIFICATIONS" & "SUBMARINES" Annexes do not cover Specialist areas.

The following table lists specialist coatings and their location of use.

| SPECIALIST SYSTEMS/MATERIALS | Generic Type | VOC gms per ltr | NATO Stock Number | BR 1326 |
|---|----------------------------------|------------------|-------------------|--------------------------|
| <u>ANTI-FOULING FOR "ARCHER" CLASS BOATS & YACHTS</u> SUPERSPEED 52 | Anti-Fouling | 411 | | N/A |
| <u>RUDDERS, STABILISERS & 'A' FRAMES</u> (i) Reblast LIMPETITE PRC (ii) Touch-up Repair LIMPETITE A3 | Elastomer Elastomer | 0 433 | | N/A N/A |
| <u>HULL (Underwater-Applied Coatings) GENERAL REPAIR</u> BIOFIX 561 LT Black CHEMI-TECH UW EPIGRIP M216 JML 2000 | Epoxy Epoxy Epoxy Epoxy | 0 0 0 0 | 99-133-9985 | N/A N/A N/A N/A |

Specialist Coatings & Paint Removers - continued

| SPECIALIST SYSTEMS/MATERIALS | Generic Type | VOC gms per ltr | NATO Stock Number | BR 1326 |
|--|--------------|-----------------|-------------------|---------|
| <u>HULL - LINK COATS FOR FOUL RELEASE PAINT SYSTEMS</u> | | | | |
| <u>Hempel Paints Ltd</u> | | | | |
| HEMPASIL NEXUS X-Seal 27600 | Silicone | 400 | | N/A |
| <u>International Paints Ltd</u> | | | | |
| Link Coat for INTERSLEEK 737: INTERSLEEK 7180 | Silicone | 376 | | N/A |
| <u>FLIGHTDECK MARKINGS</u> | | | | |
| <u>Chugoku Paints (UK) Ltd</u> | | | | |
| 521E0020 Type 1 WHITE | Epoxy | 374 | 99-541-9583 | N/A |
| 521E0013 Type 1 BLACK | Epoxy | 374 | 99-543-0790 | N/A |
| 521E2947 Type 1 RED | Epoxy | 374 | 99-543-0793 | N/A |
| 521E0013 Type 1 GREEN | Epoxy | 374 | 99-5430-791 | N/A |
| <u>Hempel Paints Ltd</u> | | | | |
| HEMPELS DECK MARKING 453GB WHITE | Epoxy | 347 | 99-323-1118 | N/A |
| HEMPELS DECK MARKING 453GB BLACK | Epoxy | 347 | 99-351-4222 | N/A |
| HEMPELS DECK MARKING 453GB RED BS381C 537 | Epoxy | 347 | 99-724-9085 | N/A |
| HEMPELS DECK MARKING 453GB GREEN BS381C 225 | Epoxy | 347 | 99-986-6762 | N/A |
| <u>International Paints Ltd</u> | | | | |
| INTERSHIELD 852 WHITE | Epoxy | 219 | 99-274-4430 | N/A |
| INTERSHIELD 852 BLACK | Epoxy | 219 | 99-250-1864 | N/A |
| INTERSHIELD 852 RED | Epoxy | 219 | 99-666-9269 | N/A |
| INTERSHIELD 852 GREEN | Epoxy | 219 | 99-871-6360 | N/A |
| <u>Leighs Paints</u> | | | | |
| EPIDEK M377 WHITE | Epoxy | 330 | 99-777-8690 | N/A |
| EPIDEK M377 BLACK | Epoxy | 330 | 99-777-8692 | N/A |
| EPIDEK M377 GREEN | Epoxy | 330 | 99-777-8691 | N/A |

Specialist Coatings & Paint Removers - continued

| SPECIALIST SYSTEMS/MATERIALS | Generic Type | VOC gms per ltr | NATO Stock Number | BR 1326 |
|---|---------------------|-----------------|-------------------|---------|
| WOODEN FLIGHT DECKS & ASSOCIATED STEELWORK <i>Note adjacent steel decks to follow Flight Decks paint system</i> | | | | |
| Hempel Paints Ltd | | | | |
| HEMPADUR 4588 MIO 1243 | Epoxy | 198 | 99-479-5449 | N/A |
| HEMPADUR 457GB Dark Sea Grey BS381C 640 | Epoxy | 198 | 99-831-0343 | N/A |
| <u>Gloss for Deck Margins:</u> HEMPEL'S NON SKID 457GA | Epoxy | 198 | 99-879-5150 | N/A |
| Leighs Paints | | | | |
| METAGARD L574 Red Oxide | Epoxy | 594 | 99-895-9894 | N/A |
| EPIGRIP M339 Extra Dark Sea Grey BS381C 640 | Epoxy | 250 | 99-215-4495 | N/A |
| <u>Gloss for Deck Margins:</u> EPIGRIP M262 | Epoxy | 354 | 99-133-8713 | N/A |
| International Paints | | | | |
| INTERSHIELD 300 (thinned 10%) | Epoxy | | | N/A |
| INTERSHIELD 300 | Epoxy | | | N/A |
| INTERSHIELD 851 | Epoxy | | 99-391-0953 | N/A |
| <u>Gloss for Deck Margins:</u> INTERGARD 740 | Epoxy | 420 | 99-182-2627 | N/A |
| RAC COATING SYSTEM | | | | |
| INTERGARD 3112 SYSTEM as specified in DEF STAN 08-205 | | | | |
| WEATHERWORK SYSTEMS OVER RAC | | | | |
| Chugoku Paints Ltd | | | | |
| CAMLAC UNDERCOAT | Alkyd | 380 | | N/A |
| CAMSIL FINISH | WB Silicone Alkyd | 116 | 99-327-9058 | N/A |
| Hempel Paints Ltd | | | | |
| HEMUDUR 1850 | Water-Based Epoxy | 85 | 99-876-8090 | N/A |
| HEMUCRYL ENAMEL 5810 | Water-Based Acrylic | 150 | 99-149-2439 | N/A |
| International Paint Ltd | | | | |
| INTERGARD 5000 | Epoxy | 179 | 99-000-5256 | N/A |
| INTERFINE 691HS | Epoxy Acrylic | 409 | 99-864-5322 | N/A |
| Jotun Paints (Europe) Limited | | | | |
| JOTAMASTIC 80 | Epoxy | 145 | | N/A |
| JOTAPROOF TOPCOAT | Epoxy Acrylic | 310 | 99-519-2253 | N/A |
| Leighs Paints | | | | |
| EPIGRIP C425V2 | Epoxy | 200 | 99-126-6377 | N/A |
| EPIGRIP C750V2 | Epoxy Acrylic | 364 | 99-212-2175 | N/A |
| Maker Coating Systems Ltd | | | | |
| AMERLOCK 400C | Epoxy | 106 | 99-974-7400 | N/A |
| SIGMADUR 540 | Epoxy Acrylic | 411 | | N/A |

Specialist Coatings & Paint Removers - continued

| SPECIALIST SYSTEMS/MATERIALS | Generic Type | VOC gms per ltr | NATO Stock Number | BR 1326 |
|--|---|---|---|--|
| <u>EMERGENCY REPAIR OF FRESH WATER TANKS</u> <u>Hempel Paints Ltd</u> Hempel's TAPECRETE 6818 | Cementitious Acrylic | 0 | 99-302-2646 | N/A |
| <u>GALVANISED STEEL & ZINC METAL SPRAY (REPAIR)</u> <u>Maker Coatings</u> ZINGA M <u>Hempel Paints Ltd</u> HEMUDUR ZINC 18560 or HEMPEL'S ZINC PRIMER 16490 <u>International Paints Ltd</u> INTERZINC 22 or INTERZINC 72 <u>Leighs Paints</u> EPIGRIP J984 | Polystyrene Water-Based Epoxy Zinc Phenoxo Zinc Silicate Zinc Epoxy Zinc Epoxy | 539 60 590 470 410 331 | 13-113-7072 | B (LI) B (CI, CF) |
| <u>VARNISHED WOODWORK</u> <u>Chugoku Paints Ltd</u> SPAR VARNISH <u>Hempel Paints Ltd</u> HEMPEL'S MARINE VARNISH 022GB <u>International Paint Ltd</u> INTERLAC 678 <u>Jotun Paints (Europe) Limited</u> SPONTAN VARNISH <u>PPG Protective & Marine Coatings</u> SIGMAVAR GLOSS 8103 | Varnish Alkyd Alkyd Urethane Alkyd Phenolic | 433 430 373 470 393 | 99-224-5783 99-328-9646 99-161-6220 | B (BLI) |
| <u>HEAT RESISTANT COATINGS (below 175 °C)</u> <u>PPG Protective & Marine Coatings</u> SIGMATHERM 175 | Modified Alkyd | 561 | | |

Specialist Coatings & Paint Removers - continued

| SPECIALIST SYSTEMS/MATERIALS | Generic Type | VOC gms per ltr | NATO Stock Number | BR 1326 |
|--|--|--------------------------------------|--|----------------------------|
| <u>HEAT RESISTANT COATINGS (above 250 °C)</u> <u>Hempel Paints Ltd</u> HEMPEL'S GALVOSIL 15700 <u>International Paint Ltd</u> INTERTHERM 890 <u>PPG Protective & Marine Coatings</u> SIGMATHERM 500 | Zinc Silicate Zinc Silicate Modified Alkyd | 435 305 600 | 99-593-8923 | BLI BLI |
| <u>HEAT RESISTANT COATINGS (above 400 °C)</u> <u>Hempel Paints Ltd</u> HEMPEL'S SILICONE ALUMINIUM 56910 <u>International Paint Ltd</u> INTERTHERM 50 <u>PPG Protective & Marine Coatings</u> SIGMATHERM 500 | Polysiloxane Silicone Modified Alkyd | 585 495 600 | 99-257-1455 | BLI |
| <u>SYSTEM FOR COATING NATURAL RUBBER MOUNTS</u> <i>Applied by Mount supplier not to be touched up once fitted</i> <u>Dunlop Precision Rubber Ltd</u> DUNLOP NPL 100 <u>Maker Coating Systems Ltd</u> GUMMIPAINT - Orange | Twin Pack Single Pack | | | B BLI |
| <u>PAINT REMOVER</u> <u>Cirrus Systems Ltd</u> REMOVAL 510 (Formally NAPIER-PMA) <u>N A Robson Ltd</u> BACK TO NATURE VIII <u>International Paint Ltd</u> INTERPLUS 634 <u>Maker Coating Systems Ltd</u> SEA TO SKY SPC-203 | Biodegradable Biodegradable Biodegradable Biodegradable | N/A N/A N/A N/A | 99-871-5945 20-003-3432 | CI |

Specialist Coatings & Paint Removers - continued

| SPECIALIST SYSTEMS/MATERIALS | Generic Type | VOC gms per ltr | NATO Stock Number | BR 1326 |
|---|-------------------------|-----------------|-------------------|---------|
| <u>UNIQUE IMMERSSED AREAS, PUMPS ETC</u> | | | | |
| <u>Corrocoat Limited</u> | | | | |
| CORROGLASS 202 | Polyester Glass Flake | | | |
| CORROGLASS 232 | Polyester Glass Flake | | | |
| CORROGLASS 602 | Vinyl Ester Glass Flake | | | |
| CORROGLASS 632 | Vinyl Ester Glass Flake | | | |
| POLYGLASS VE | Vinyl Ester Glass Flake | | | |
| POLYGLASS VE HAND APPLIED | Vinyl Ester Glass Flake | | | |
| POLYGLASS VEF | Vinyl Ester Glass Flake | | | |
| POLYGLASS ZIPCOAT | Polyester Glass Flake | | | |
| CORROCOAT ZIP E | Glass Flake Epoxy | | | |

6.2 Cleaning Materials and Rust Removers

DES SE Sea-ShipDes2a is the Ship Husbandry (excluding Paint) & Habitability desk officer. All enquiries regarding cleaning materials and rust removers should be emailed to DESSESea-ShipDes2a@mod.uk alternatively telephone 030679 39673. (Rust removers should only be used on un-painted surfaces; they are not a part of any approved paint system)

- 6.2.1 Details of all current and future approved products, that are compatible with RN approved paint coatings, can and will be found in BR2203 as well as in the Ship / Submarine Husbandry & Habitability Information Portal. This database can be accessed via the internet. Contact DES SE Sea-ShipDes2a for further details.

6.3 Specialist Coatings Suppliers contact details:

| | | |
|-----------------------------------|----------------------------|------------------|
| Superspeed 52 | H Marcel Guest | Tel 0161 2057631 |
| Limpetite | Bristol Metal Spraying | Tel 0117 9662206 |
| BIOFIX 561LT | Innovative Epoxy Solutions | Tel 01454 612445 |
| Chemi-Tech UW | Thortex Ltd | Tel 01609 780170 |
| JML 2000 | Jones Marine Ltd | Tel 02380 448100 |
| Zinga | Maker Coating Systems Ltd | Tel 01392 822600 |
| Gummipaint-Orange | Maker Coating Systems Ltd | Tel 01392 822600 |
| Removall 510 | Cirrus Systems Ltd | Tel 01305 822659 |
| Back to Nature VIII | N A Robson Ltd | Tel 01253 393406 |
| Sea to Sky SPC-203 | Maker Coating Systems Ltd | Tel 01392 822600 |
| Corroglass & Polyglass | Corrocoat Ltd | Tel 01132 760760 |

- 6.4 RCOL Site Safety Systems have reluctantly decided that as a consequence of the impact of Whole Ship Specifications, they wish to withdraw their Epoxo materials from RN supply. Therefore all reference to Rocol and Epoxo has been removed from the tables above. They advise that they still hold limited stocks and can continue to supply in the short term if required.

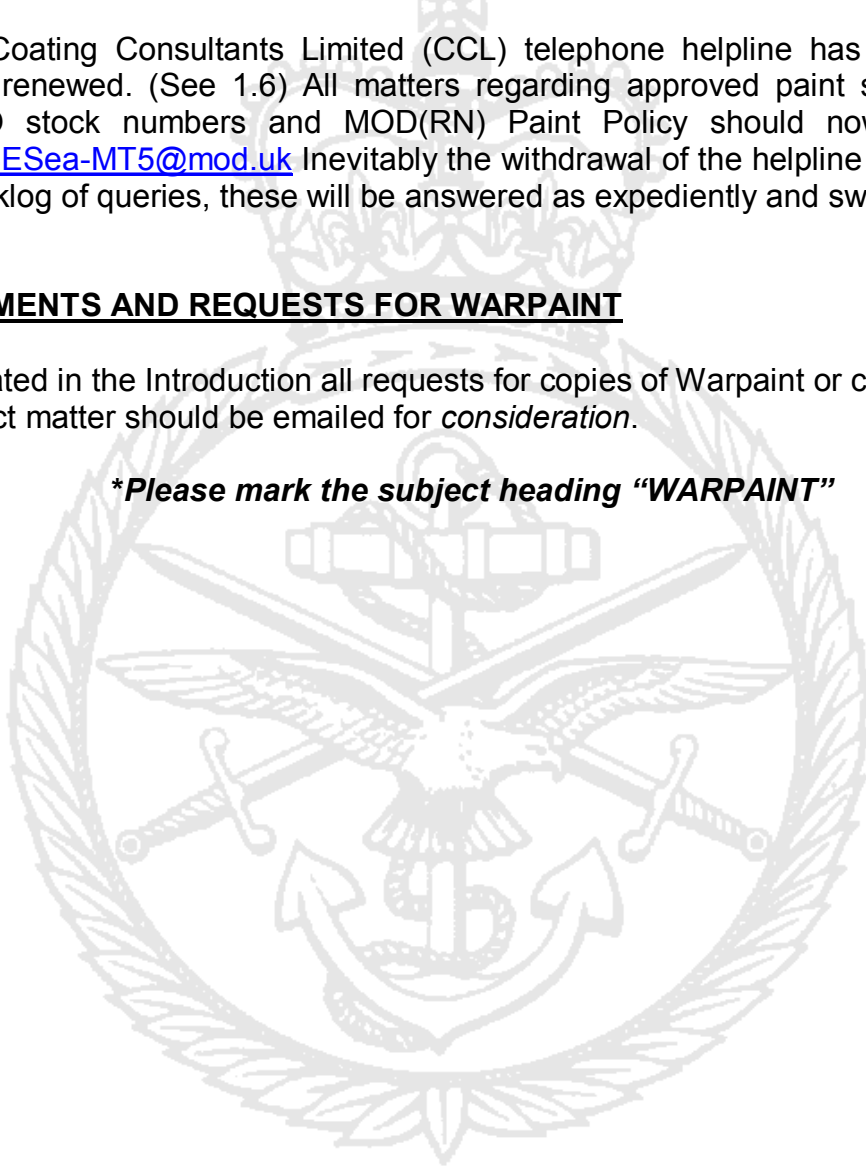
7. QUERIES ON PAINTING AND PRESERVATION

- 7.1 The Coating Consultants Limited (CCL) telephone helpline has unfortunately not been renewed. (See 1.6) All matters regarding approved paint systems/materials, NATO stock numbers and MOD(RN) Paint Policy should now be emailed to DESSESea-MT5@mod.uk Inevitably the withdrawal of the helpline service will create a backlog of queries, these will be answered as expediently and swiftly as possible.

8. COMMENTS AND REQUESTS FOR WARPAINT

As stated in the Introduction all requests for copies of Warpaint or comments on any subject matter should be emailed for *consideration*.

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ANNEXE A
WHOLE SHIP SPECIFICATION
Proposed by

CHUGOKU PAINTS (UK) Ltd

| Proposed Systems/Materials | Number of coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| A. UNDERWATER PRIMER (Re-blast) ~ | | | | | | | |
| (I) <u>Standard</u> : UMEGUARD HS SILVER* | 1 | 150 | 5.93 | 20 hrs | 30 days | 158 | 99-264-0145 |
| (ii) <u>Tie per coat</u> : SILVAX SQ K | 1 | 50 | 6.0 | 8 hrs | # | 620 | 99-264-0145 |
| B. UNDERWATER PRIMER (Touch Up at Docking) | | | | | | | |
| (I) <u>Standard</u> : UMEGUARD HS SILVER* | 1 | 150 | 5.93 | 20 hrs | 30 days | 158 | 99-264-0145 |
| (ii) <u>Tie-coat</u> : SILVAX SQ K | 1 | 50 | 6.0 | 8 hrs | # | 620 | |
| C. ANTIFOULING (Tin Free - 5yr life) | | | | | | | |
| SEA GRANDPRIX 500 | 3 | 125 | 3.76 | 5 hrs | # | 484 | |
| D. ANTIFOULING (FOUL RELEASE 5+ yr life) | | | | | | | |
| E. ANTIFOULING (Tin Free 3+ yr life) | | | | | | | |
| TFA 10 | 2 | 125 | 5.44 | 5 hrs | # | 383 | |
| F. BOOTTOP ANTIFOULING (Tin Free) | | | | | | | |
| SEAJET 33 | 2 | 125 | 3.52 | 5 hrs | # | 485 | |
| G. A/W HULL & SUPERSTRUCTURE PRIMER (Reblast) | | | | | | | |
| UMEGUARD HS SILVER* | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-264-0145 |
| H. A/W HULL & SUPERSTRUCTURE PRIMER (Touch Up) | | | | | | | |
| (i) <u>Standard</u> : UMEGUARD HS SILVER* | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-264-0145 |
| (ii) <u>Alternative</u> : CAMACRYL ZP PRIMER | 2 | 60 | 6.66 | 6 hrs | # | 50 | 99-125-9909 |
| J. A/W HULL & SUPERSTRUCTURE | | | | | | | |
| (i) <u>Standard</u> : CAMSIL WB GF WATERBASED FINISH Light Weatherwork GreyBS381C 676 | 2 | 25 | 14.40 | 16 hrs | # | 116 | 99-327-9058 |
| (ii) <u>Alternative</u> : HD WEATHERWORK FINISH Light Weatherwork GreyBS381C 676 | 1 | 40 | 11.80 | 16 hrs | # | 400 | |
| (iii) <u>Tie-coat (if required)</u> : Weatherwork U/C | 1 | 50 | 11.40 | 16 hrs | # | 380 | |
| (iv) <u>Sealer for RASH</u> | | | | | | | |

ANNEXE A
WHOLE SHIP SPECIFICATION
Proposed by

CHUGOKU PAINTS (UK) Ltd

| Proposed Systems/Materials | Number of coats | NDFT per coat Microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| K.. FLIGHT & WEATHERDECK SYSTEMS – DEF STAN 80-134 | | | | | | | |
| <u>(a). Hangar Doors</u> | | | | | | | |
| <u>Primer:</u> UMEGUARD HS SILVER* | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-264-0145 |
| <u>Finish:</u> CAMSIL WB GF WATERBASED FINISH Light Weatherwork Grey BS381C 676 | 2 | 25 | 14.40 | 16 hrs | # | 116 | 88-327-9058 |
| <u>(b). Flightdeck - Type 2 Non-skid Finish</u> | | | | | | | |
| <u>Primer:</u> UMEGUARD HS SILVER | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-264-0145 |
| <u>Finish:</u> CAMIDECK FINISH TYPE II Extra Dark Sea Grey BS381C 640 | 2 | 208 | 2.83 | 16 hrs | # | 374 | 99-147-1303 |
| <u>Type 2 Repair Kit:</u> | | | | | | | 99-577-3550 |
| <u>(c). Hangar Decks & Weatherdecks - Type 1 Non-skid Finish:</u> | | | | | | | |
| <u>Primer:</u> UMEGUARD HS SILVER | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-264-0145 |
| <u>Hanger Deck</u> CAMIDECK FINISH TYPE I Dark Admiralty Grey BS381C 632 | 2 | 190 | 2.84 | 16 hrs | # | 374 | 99-541-9581 |
| <u>Weatherdecks</u> CAMIDECK FINISH TYPE I Extra Dark Sea Grey BS381C 640 | 2 | 190 | 2.84 | 16 hrs | # | 374 | |
| <u>Type 1 Repair Kit:</u> | | | | | | | |
| <u>(d). Gloss for Deck Margins:</u> UMEGUARD HS GREY Extra Dark Sea Grey BS381C 640 | 2 | 75 | 11.86 | 20 hrs | 30 days | 158 | 99-126-9478 |
| L. INTERIOR DRY SPACES (Complete Represervation) | | | | | | | |
| <u>Standard Primer:</u> UMEGUARD HS SILVER | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-264-0145 |
| <u>Finish:</u> CAMACRYL FINISH MAC BS4800 00A01 | 2 | 40 | 11 | 24 hrs | # | 33 | 99-676-4126 |
| or | | | | | | | |
| <u>Alternative Finish:</u> AQUALIFE GLOSS FINISH BS4800 00A01 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-757-9334 |
| M. INTERIOR DRY SPACES (Touch up) | | | | | | | |
| <u>(i) Standard Primer:</u> UMEGUARD HS SILVER | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-264-0145 |
| <u>Finish:</u> CAMACRYL FINISH MAC | 2 | 40 | 11 | 24 hrs | # | 33 | 99-676-4126 |
| or | | | | | | | |
| <u>Alternative Finish:</u> AQUALIFE GLOSS FINISH BS4800 00A01 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-757-9334 |
| <u>(ii) Alternative Primer:</u> CAMACRYL ZP PRIMER | 2 | 60 | 6.66 | 6 hrs | # | 50 | 99-125-9909 |
| <u>Finish:</u> CAMACRYL FINISH MAC | 2 | 40 | 11 | 24 hrs | # | 33 | 99-676-4126 |
| or | | | | | | | |
| <u>Alternative Finish:</u> AQUALIFE GLOSS FINISH BS4800 00A01 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-757-9334 |

ANNEXE A
WHOLE SHIP SPECIFICATION
Proposed by

CHUGOKU PAINTS (UK) Ltd

| Proposed Systems/Materials | Number of coats | NDFT per coat Microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| <u>N. INTERIOR WET SPACES (Touch up)</u> | | | | | | | |
| (i) <u>Standard Primer:</u> UMEGUARD HS SILVER | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-264-0145 |
| <u>Finish:</u> AQUALIFE GLOSS FINISH Ash Grey BS4800 00A01 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-757-9334 |
| (ii) <u>Citadel lobby Primer:</u> UMEGUARD HS SILVER | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-264-0145 |
| <u>Finish:</u> AQUALIFE GLOSS FINISH - Colour BS4800 00A01 or Grey BS381C 676 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-757-9334 |
| (iii) <u>Cleansing Stations Primer:</u> UMEGUARD HS | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | |
| <u>Finish:</u> AQUALIFE GLOSS FINISH White | 2 | 40 | 10 | 16 hrs | 7 days | 132 | |
| (iv) <u>Magazine Primer:</u> UMEGUARD HS | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-126-9478 |
| <u>Finish:</u> AQUALIFE GLOSS FINISH BS4800 00A01 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-757-9334 |
| <u>O. INTERIOR WET SPACES (Touch up)</u> | | | | | | | |
| (i) <u>Standard Primer:</u> UMEGUARD HS SILVER | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-264-0145 |
| <u>Finish:</u> AQUALIFE GLOSS FINISH Ash Grey BS4800 00A01 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-757-9334 |
| (ii) <u>Citadel lobby Primer:</u> UMEGUARD HS SILVER | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-264-0145 |
| <u>Finish:</u> AQUALIFE GLOSS FINISH - Colour BS4800 00A01 or Grey BS381C 676 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-757-9334 |
| (iii) <u>Cleansing Stations Primer:</u> UMEGUARD HS | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | |
| <u>Finish:</u> AQUALIFE GLOSS FINISH White | 2 | 40 | 10 | 16 hrs | 7 days | 132 | |
| (iv) <u>Magazine Primer:</u> UMEGUARD HS | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-126-9478 |
| <u>Finish:</u> AQUALIFE GLOSS FINISH BS4800 00A01 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-757-9334 |
| <u>P. INTERIOR DECKS</u> | | | | | | | |
| (i) <u>Standard Primer:</u> AQUALIFE WSE PRIMER | 2 | 50 | 9 | 16 hrs | # | 0 | 99-398-1182 |
| <u>Finish:</u> AQUALIFE FINISH Green 14C39 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-755-6242 |
| (ii) <u>Cleansing Stations Primer:</u> UMEGUARD HS | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | |
| <u>Finish:</u> AQUALIFE FINISH Green 14C39 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-755-6242 |
| <u>Q. BATTERY COMPARTMENTS</u> | | | | | | | |
| (i) <u>Primer:</u> UMEGUARD HS SILVER | 1 | 125 | 7.40 | 20 hrs | 30 days | 108 | 99-264-0145 |
| (ii) <u>Finish:</u> AQUALIFE GLOSS FINISH BS4800 00A01 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-757-9334 |

ANNEXE A
WHOLE SHIP SPECIFICATION
Proposed by

CHUGOKU PAINTS (UK) Ltd

| Proposed Systems/Materials | Number of coats | NDFT per coat microns | Theo SP m ² /litre | Min Recoat interval | Max Recoat interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| R. <u>CABLE LOCKERS & COFFERDAMS</u> | | | | | | | |
| (i) UMEGUARD HS SILVER* | 1 | 125 | 7.40 | 20 hrs | 30 days | 108 | 99-264-0145 |
| UMEGUARD HS GREY | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-126-9478 |
| or | | | | | | | |
| (ii) NOVA 2000 | 2 | 125 | 6.50 | 15 hrs | 10 days | 173 | |
| S. <u>SEWAGE & WATER BALLAST TANKS.</u> | | | | | | | |
| (i) UMEGUARD HS SILVER* | 1 | 125 | 6.50 | 15 hrs | 10 days | 108 | 99-264-0145 |
| UMEGUARD HS GREY | 1 | 125 | 6.50 | 15 hrs | 10 days | 158 | 99-126-9478 |
| or | | | | | | | |
| (ii) NOVA 2000 | 2 | 125 | 6.50 | 15 hrs | 10 days | 173 | |
| T. <u>MACHINERY SPACE BILGES</u> | | | | | | | |
| (i) UMEGUARD HS SILVER | 1 | 125 | 6.50 | 15 hrs | 10 days | 108 | 99-264-0145 |
| UMEGUARD HS WHITE | 1 | 125 | 6.50 | 15 hrs | 10 days | 158 | 99-564-2409 |
| or | | | | | | | |
| (ii) NOVA 2000 | 2 | 125 | 6.50 | 15 hrs | 10 days | 173 | |
| U. <u>AVCAT, DIESEL, LUB & HYDRAULIC OIL TANKS SYSTEM</u> <u>DEF STAN 80-97 (HIGH SOLIDS)</u> | | | | | | | |
| (i) <u>Standard</u> : NOVA 2000* | 2 | 125 | 6.50 | 15 hrs | 10 days | 173 | |
| (ii) <u>Alternative</u> : CLEANKEEP 5000* | 1 | 300 | 3.33 | 48 hrs | 7 days | 0 | |
| V. <u>POTABLE WATER TANKS</u> | | | | | | | |
| CLEANKEEP 5000* | 1 | 300 | 3.33 | 48 hrs | 7 days | 0 | |
| W. <u>AQUEOUS FILM-FORMING FOAM (AFFF) TANKS</u> | | | | | | | |
| EPICON T800 PRIMER | 1 | 25 | 13.80 | 8 hrs | 15 days | 422 | |
| EPICON T800 FINISH | 2 | 125 | 4.56 | 12 hrs | 7 days | 407 | |
| X. <u>DEMINERALISED WATER TANKS (Max Temperature 90°C)</u> | | | | | | | |
| EPICON T800 PRIMER | 1 | 25 | 13.80 | 8 hrs | 15 days | 422 | |
| EPICON T800 FINISH | 2 | 125 | 4.56 | 12 hrs | 7 days | 407 | |
| Y. <u>EPOXY HOLDING PRIMER</u> | | | | | | | |
| NZ PRIMER S (ex SHOT-α-KOTE) | 1 | 25 | 15.9 | 16 hrs | # | 641 | |

ANNEXE A
WHOLE SHIP SPECIFICATION
Proposed by

CHUGOKU PAINTS (UK) Ltd

| Proposed Systems/Materials | Number of coats | NDFT per coat Microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| Z. PRIMERS FOR NON-FERROUS METALS | | | | | | | |
| (i) <u>Aluminium</u> : ALP 500 | 1 | 50 | 11.6 | 10 hrs | # | 414 | 99-967-8636 |
| (ii) <u>Stainless Steel</u> : UMEGUARD HS | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-126-9478 |
| (iii) <u>Zinc Spray</u> : GALVANITE 200 | 1 | 30 | 14.10 | 4 hrs | 30 days | 587 | 99-290-5829 |
| (iv) <u>Galvanise</u> : GALVANITE 200 | 1 | 30 | 14.10 | 4 hrs | 30 days | 587 | 99-290-5829 |
| (v) <u>FRP Indicator coat</u> : | | | | | | | |

Notes:

1. The recoat intervals published above are based on the manufacturer's figures quoted for 20°C
2. The number of coats stated in the above table, relate to airless spray application to achieve the stated dry film thickness (NDFT). Should brush application be required for touch up and repair then additional coats may be necessary to achieve the required NDFT.
3. # = No maximum recoat interval, see Manufacturer's Technical Data Sheet/Application Instructions for requirements.
4. It is important to ensure that surfaces are clean and free of contamination when overcoating materials, that have been left exposed, this is especially true for those products with an indefinite recoat interval.
5. The Theoretical Spreading Rate (TSR) quoted in the table above is calculated from the coatings physical constants and makes no allowance for loss and assumes a totally smooth surface. The actual spreading rate achieved Practical Spreading Rate (PSR) is dependent upon many factors and in practice the factor used may vary from as little as 1.05 up to as much as 4+. It is usual for paint manufactures to use figures of 1.3 or 1.4 for estimating purposes but they always add the caveat that actual consumption achieved may vary due to such factors as surface profile, wastage due to material left in the can, weather conditions, skill of operator etc.
6. ~ = Use blast primer Y. when appropriate

INTENTIONALLY BLANK



INTENTIONALLY BLANK

ANNEX B
WHOLE SHIP SPECIFICATION
Proposed by

HEMPEL UK LTD

| Hempel's proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| A. UNDERWATER PRIMER (Re-blast) ~ | | | | | | | |
| (i) <u>Standard:</u> HEMPADUR 45880 MIO 1243 | 1 | 175 | 4.6 | 8 hrs | 30days | 198 | 99-803-7233 |
| (ii) <u>Alternative:</u> HEMPADUR QUATTRO 17634 | 1 | 175 | 4.1 | 6 hrs | 90 days | 275 | |
| (iii) <u>Tie Coat:</u> HEMPADUR 45182 | 1 | 75 | 6.1 | 6 hrs | 5 days | 485 | 99-893-9646 |
| (iv) <u>Tie Coat For D:</u> HEMPEL NEXUS 27302 | 1 | 120 | 5.8 | 6 hrs | 24 hrs | 265 | |
| B. UNDERWATER PRIMER (T/U at Docking) | | | | | | | |
| (i) <u>Standard:</u> HEMPADUR 45880 MIO 12430 | 1 | 175 | 4.6 | 8 hrs | 30 days | 198 | 99-803-7233 |
| (ii) <u>Alternative:</u> HEMPADUR QUATTRO 17634 | 1 | 175 | 4.1 | 6 hrs | 90 days | 275 | |
| (iii) <u>Tie Coat:</u> HEMPADUR 45182 | 1 | 75 | 6.1 | 6 hrs | 5 days | 485 | 99-893-9646 |
| (iv) <u>Tie Coat For D:</u> HEMPEL NEXUS 27302 | 1 | 120 | 5.8 | 6 hrs | 24 hrs | 265 | |
| C. ANTIFOULING (Tin Free – 5 year life) | | | | | | | |
| HEMPELS ANTI-FOULING GLOBIC NCT 8195N | 2 | 130 | 4.2 | 10 hrs | # | 410 | |
| D. ANTIFOULING (FOUL RELEASE 5+ yr life) | | | | | | | |
| HEMPASIL X3 87500 | 1 | 150 | 4.7 | 6 hrs | # | 265 | |
| E. ANTIFOULING (Tin Free 3+ year life) | | | | | | | |
| (i) <u>Standard:</u> OLYMPIC 86950 | 2 | 100 | 5.0 | 8 hrs | # | 470 | |
| (ii) <u>Alternative:</u> GLOBIC NCT 8195N | 2 | 100 | 5.5 | 10 hrs | # | 410 | |
| F. BOOTTOP ANTIFOULING (Tin Free) | | | | | | | |
| OLYMPIC 86950 | 2 | 100 | 5.0 | 8 hrs | # | 470 | 99-147-9828 |
| G. A/W HULL & SUPERSTRUCTURE PRIMER (Reblast) | | | | | | | |
| HEMPADUR 45880 MIO 12430 | 1 | 150 | 6.0 | 8 hrs | # | 198 | 99-803-7233 |

ANNEX B
WHOLE SHIP SPECIFICATION
Proposed by

HEMPEL UK LTD

| Hempel's proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| H. A/W HULL & SUPERSTRUCTURE PRIMER (Touch Up) | | | | | | | |
| (i) <u>Standard:</u> HEMPADUR 45880 MIO 12430 | 1 | 150 | 6.0 | 8 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Alternative :</u> HEMUCRYL PRIMER 18100 | 2 | 30 | 15.7 | 4 hrs | # | 65 | 99-909-6026 |
| J. A/W HULL & SUPERSTRUCTURE FINISH | | | | | | | |
| (i) <u>Standard:</u> HEMPEL'S PRO ACRYLIC 55880 Light Weatherwork Grey BS 381C 676 | 1 | 50 | 12.0 | 12 hrs | # | 380 | |
| (ii) <u>Alternative:</u> HEMPEL'S SILICONE ALKYD FINISH Light Weatherwork Grey BS 381C 676 | 1 | 35 | 15.4 | 8 hrs | 1-2 days | 410 | 99-772-5448 |
| (iii) <u>Tie Coat – (if required)</u> HEMPEL'S UNDERCOAT | 1 | 40 | 12.5 | 8 hrs | 7 days | 385 | 99-224-6752 |
| (iv) <u>Sealer for RASH</u> HEMUCRYL 18100 | 1 | 30 | 15.7 | 4 hrs | # | 65 | 99-909-6062 |
| K. FLIGHT & WEATHERDECK SYSTEMS – DEF STAN 80-134 | | | | | | | |
| <u>(a) Hangar Doors</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 MIO 12430 | 1 | 100 | 8.0 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Finish:</u> HEMPEL'S PRO ACRYLIC 55880 Light Weatherwork Grey BS 381C 676 | 1 | 50 | 12.0 | 12 hrs | # | 380 | |
| <u>(b) Flight Deck - Type 2 Non-skid Finish:</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 MIO 12430 | 1 | 100 | 8.0 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Finish:</u> HEMPEL'S NON SKID 457GB Extra Dark Sea Grey BS 381C 640 | 2 | 400 | 1.9 | 6 hrs | 30days | 206 | 99-831-0343 |
| (iv) <u>Type 2 Repair Kit:</u> HEMPEL'S DECK REPAIR KIT 941 Extra Dark Sea Grey BS 381C 640 | | | | | | | 99-340-2100 |
| <u>(c) Hangar Deck & Weatherdeck - Type 1 Non-skid Finish:</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 MIO 12430 | 1 | 100 | 8.0 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Hangar Deck – Finish:</u> HEMPEL'S NON SKID 45340 Dark Admiralty Grey BS 381C 632 | 2 | 200 | 3.2 | 6 hrs | 30days | 347 | 99-670-9581 |
| (iii) <u>Weatherdeck - Finish:</u> HEMPEL'S NON SKID 45340 Extra Dark Sea Grey BS 381C 640 | 2 | 200 | 3.2 | 6 hrs | 30days | 347 | 99-213-1121 |
| (iv) <u>Type 1 Repair Kit:</u> HEMPEL'S DECK REPAIR KIT 942GB Extra Dark Sea Grey BS 381C 640 | | | | | | | 99-471-2960 |
| <u>(d) Gloss for Deck Margins:</u> HEMPEL'S NON SKID 457GA | 2 | 125 | 5.0 | 5 hrs | # | 330 | 99-879-5150 |

ANNEX B
WHOLE SHIP SPECIFICATION
Proposed by

HEMPEL UK LTD

| Hempel's proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| L. INTERIOR DRY COMPARTMENTS (Complete | | | | | | | |
| (i) <u>Standard Primer:</u> HEMPADUR 45880 | 1 | 125 | 6.4 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Alternative Primer:</u> HEMUCRYL Primer High Build 18032 | 1 | 75 | 5.7 | 2 hrs | # | 45 | |
| (iii) <u>Finish:</u> HEMUCRYL ENAMEL 58100 BS 4800 00A01 | 2 | 30 | 13.7 | 6 hrs | # | 70 | 99-660-9288 |
| (iv) <u>Alternative Finish</u> HEMPEL'S WATER BASED EPOXY BS 4800 00A01 | 1 | 80 | 6.9 | 12 hrs | 15 days | 27 | 99-988-2715 |
| M. INTERIOR DRY COMPARTMENTS (Touch up) | | | | | | | |
| (i) <u>Standard Primer:</u> HEMPADUR 45880 | 1 | 125 | 6.4 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Alternative Primer:</u> HEMUCRYL Primer High Build | 1 | 75 | 5.7 | 2 hrs | # | 45 | |
| (iii) <u>Finish:</u> HEMUCRYL ENAMEL 58100 BS 4800 00A01 | 2 | 30 | 13.7 | 6 hrs | # | 70 | 99-660-9288 |
| (iv) <u>Alternative Finish:</u> HEMPEL'S WATER BASED BS 4800 00A01 | 1 | 80 | 6.9 | 12 hrs | 15 days | 27 | 99-988-2715 |
| N. INTERIOR WET COMPARTMENTS (Complete | | | | | | | |
| (a) <u>Standard areas</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 | 1 | 125 | 6.4 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Alternative Primer A:</u> HEMPADUR 17634 | 1 | 125 | 5.8 | 5 hrs | # | 275 | |
| (iii) <u>Alternative Primer B:</u> HEMUDUR 18500 | 1 | 60 | 8.8 | 6 hrs | 1 week | 25 | 99-867-8090 |
| (iv) <u>Finish:</u> HEMPEL'S WATER BASED EPOXY BS 4800 00A01 | 1 | 80 | 6.9 | 12 hrs | 15 days | 27 | 99-988-2715 |
| (b) <u>Citadel Lobby</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 | 1 | 125 | 6.4 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Finish:</u> HEMPEL'S WATER BASED EPOXY BS 4800 00A01 or Grey BS 381C 676 | 1 | 80 | 6.9 | 12 hrs | 15 days | 27 | 99-988-2715 |
| (c) <u>Cleansing Stations</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 | 1 | 125 | 6.4 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Finish:</u> HEMPADUR 45143 White | 1 | 100 | 6.0 | 8 hrs | # | 375 | 99-602-7280 |

ANNEX B
WHOLE SHIP SPECIFICATION
Proposed by

HEMPEL UK LTD

| Hempel's proposed Systems/Materials | of Coats | per coat microns | SR m ² /litre | Recoat Interval | Recoat Interval | gms per ltr | Stock Number |
|--|----------|------------------|--------------------------|-----------------|-----------------|-------------|--------------|
| N. INTERIOR WET COMPARTMENTS (cont) | | | | | | | |
| (d) <u>Aluminium Free Coatings for Magazine Use</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 | 1 | 100 | 8.0 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Finish:</u> HEMPEL'S WATER BASED BS 4800 00A01 | 1 | 80 | 6.9 | 1 hrs | 15 days | 27 | 99-988-2715 |
| O. INTERIOR WET COMPARTMENTS (Touch up) | | | | | | | |
| (a) <u>Standard areas</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 | 1 | 125 | 6.4 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Finish:</u> HEMPEL'S WATER BASED BS 4800 00A01 | 1 | 80 | 6.9 | 12 hrs | 15 days | 27 | 99-988-2715 |
| (b) <u>Citadel Lobby</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 | 1 | 125 | 6.4 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Finish:</u> HEMPEL'S WATER BASED BS 4800 00A01 or Grey BS 381C | 1 | 80 | 6.9 | 12 hrs | 15 days | 27 | 99-988-2715 |
| (c) <u>Cleansing Stations</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 | 1 | 125 | 6.4 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Finish:</u> HEMPADUR 45143 White 10000 | 1 | 100 | 6.0 | 8 hrs | # | 375 | 99-602-7280 |
| (d) <u>Aluminium Free Coatings for Magazine Use</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 | 1 | 100 | 8.0 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Finish:</u> HEMPEL'S WATER BASED BS 4800 00A01 | 1 | 80 | 6.9 | 12 hrs | 15 days | 27 | 99-988-2715 |
| P. INTERIOR DECKS | | | | | | | |
| (i) <u>Standard Primer:</u> HEMPADUR 45880 | 1 | 125 | 6.4 | 7 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Finish:</u> HEMPEL'S WATER BASED EPOXY BS 4800 Green 14C39 | 1 | 80 | 6.9 | 12 hrs | 15 days | 27 | 99-279-8221 |
| (iii) <u>Cleansing Stations Primer:</u> HEMPADUR 45880 | 1 | 125 | 6.4 | 7 hrs | # | 220 | 99-803-7233 |
| (iii) <u>Finish:</u> HEMPADUR 45143 BS 4800 Green | 1 | 100 | 6.0 | 8 hrs | # | 375 | 99-471-1920 |

ANNEX B
WHOLE SHIP SPECIFICATION
Proposed by

HEMPEL UK LTD

| Hempel's proposed Systems/Materials | Number of coats | NDFT per coat microns | Theo SR m²/litre | Min recoat interval | Max recoat interval | VOC grms per litre | NATO Stock Number |
|--|-----------------|-----------------------|------------------|---------------------|---------------------|--------------------|-------------------|
| Q. <u>BATTERY COMPARTMENTS</u> | | | | | | | |
| (i) <u>Primer:</u> HEMPADUR 45880 | 1 | 150 | 6.0 | 8 hrs | # | 198 | 99-803-7233 |
| (ii) <u>Alternative Primer:</u> HEMUDUR 18500 | 1 | 60 | 8.5 | 6 hrs | 1week | 20 | 99-867-8090 |
| (iii) <u>Finish:</u> HEMPEL'S WATERBASED EPOXY BS 4800 00A01 | 1 | 80 | 6.9 | 12 hrs | 15 days | 27 | 99-988-2715 |
| R. <u>CABLE LOCKERS & COFFERDAMS</u> | | | | | | | |
| HEMPADUR 45880 White | 1 | 150 | 6.0 | 8 hrs | # | 217 | 99-264-0387 |
| S. <u>SEWAGE & WATER BALLAST TANKS.</u> | | | | | | | |
| (i) <u>Water Ballast Tanks:</u> HEMPADUR QUATTRO | 2 | 150 | 4.8 | 6 hrs | 90 days | 275 | |
| (ii) <u>Sewage Tanks:</u> HEMPADUR 85671 | 3 | 100 | 6.8 | 36 hrs | 5 days | 320 | |
| T. <u>MACHINERY SPACE BILGES</u> | | | | | | | |
| HEMPADUR 45880 White | 2 | 125 | 6.4 | 7hrs | # | 217 | 99-264-0387 |
| U. <u>AVCAT, DIESO, LUB & HYDRAULIC OIL TANKS</u> <u>- DEF STAN 80-97 (HIGH SOLIDS)</u> | | | | | | | |
| (i) <u>Standard</u> HEMPADUR 85671 | 3 | 100 | 6.8 | 36hrs | 21 days | 320 | |
| (ii) <u>Alternative</u> HEMPADUR 35530 | 2 | 200 | 5.0 | 24hrs | 5 days | 10 | |
| V. <u>POTABLE WATER TANKS</u> | | | | | | | |
| (i) <u>Standard</u> HEMPADUR MULTI STRENGTH | 2 | 200 | 5.0 | 24 hrs | 5 days | 10 | 99-302-2646 |
| (ii) <u>Alternative for touch up</u> HEMPEL'S TAPECRETE | 1 | 500 | 1.9 | 2-3 hrs | # | 0 | |
| W. <u>AQUEOUS FILM-FORMING FOAM (AFFF) TANKS</u> | | | | | | | |
| HEMPADUR 85671 | 3 | 100 | 6.8 | 36 hrs | 21 days | 320 | |
| X. <u>DEMINERALISED WATER TANKS (Max Temperature</u> | | | | | | | |
| HEMPADUR 85671 | 3 | 100 | 6.8 | 36 hrs | 21 days | 320 | |
| Y. <u>EPOXY HOLDING PRIMER</u> | | | | | | | |
| HEMPADUR 15570 | 1 | 40 | 13.5 | # | # | 420 | 99-943-1152 |

ANNEX B
WHOLE SHIP SPECIFICATION
Proposed by

HEMPEL UK LTD

| Hempel's proposed Systems/Materials | | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|------------------------------------|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| Z. PRIMERS FOR NON-FERROUS METALS | | | | | | | | |
| (i) <u>Aluminium</u> | HEMUCRYL TIE COAT 18200 (1 pack) | 1 | 20 | 19.0 | 24 hrs | # | 40 | 99-199-2908 |
| | HEMPADUR 15553 (2 pack) | 1 | 50 | 11.0 | 2 hrs | # | 400 | 99-870-0653 |
| (ii) <u>Stainless Steel</u> | HEMUCRYL TIE COAT 18200 (1 pack) | 1 | 20 | 19.0 | 24 hrs | # | 40 | 99-199-2908 |
| | HEMPADUR 15553 (2 pack) | 1 | 50 | 11.0 | 2 hrs | # | 400 | 99-870-0653 |
| (iii) <u>Zinc Spray</u> <u>Galvanise</u> | HEMUCRYL TIE COAT 18200 (1 pack) | 1 | 20 | 19.0 | 24 hrs | # | 40 | 99-199-2908 |
| | HEMPADUR 15553 (2 pack) | 1 | 50 | 11.0 | 2 hrs | # | 400 | 99-870-0653 |
| (iv) <u>Indicator Coat for FRP</u> | GELPROTECT SFE200 Cream | 1 | 200 | 5.0 | 8 hrs | 5 days | 10 | 99-517-4318 |

Notes:

1. The recoat intervals published above are based on the manufacturer's figures quoted for 20°C
2. The number of coats stated in the above table, relate to airless spray application to achieve the stated Nominal Dry Film Thickness (NDFT). Should brush application be required for touch up and repair then additional coats may be necessary to achieve the required NDFT.
3. # See Manufacturer's Technical Data Sheet/Application Instructions for requirements.
4. It is important to ensure that surfaces are clean and free of contamination when overcoating materials, that have been left exposed, this is especially true for those products with an indefinite recoat interval.
5. The Theoretical Spreading Rate (Theo SR) quoted in the table above is calculated from the coatings physical constants and makes no allowance for loss and assumes a totally smooth surface. The actual spreading rate achieved (Practical SR) is dependent upon many factors and in practice the factor used may vary from as little as 1.05 up to as much as 4+. It is usual for paint manufactures to use figures of 1.3 or 1.4 for estimating purposes but they always add the caveat that actual consumption achieved may vary due to such factors as surface profile, wastage due to material left in the can, weather conditions, skill of operator etc.
6. ~ = Use blast primer Y. when appropriate.

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ANNEXE C
WHOLE SHIP SPECIFICATIONS
Proposed by

INTERNATIONAL PAINT LTD

| Proposed Systems/Materials | | | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms Per ltr | NATO Stock Number |
|--|-----------------------------|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| A. UNDERWATER PRIMER (Re-blast) ~ | | | | | | | | | |
| (i) | Standard: | INTERGARD 5000 | 1 | 175 | 4.68 | 12 hrs | 2 months | 179 | 99-133-3854 |
| (ii) | Alternative: | INTERSHIELD 300 Foul Release only (Area D) | 2 | 125 | 4.80 | 7 hrs | 14 days | 313 | |
| (iii) | Tie Coat for C: | INTERGARD 263 | 1 | 75 | 7.60 | 8 hrs | 5 days | 379 | |
| (iv) | Tie Coat for D (if needed): | INTERSLEEK 737 | 1 | 100 | 6.5 | 4 hrs | 7 days | 325 | |
| B. UNDERWATER PRIMER (T/U at Docking) | | | | | | | | | |
| (i) | Standard: | INTERGARD 5000 | 1 | 175 | 4.68 | 12 hrs | 2 months | 179 | 99-133-3854 |
| (ii) | Alternative: | INTERSHIELD 300 Foul Release only (Area D) | 2 | 125 | 4.80 | 7 hrs | 14 days | 313 | |
| (iii) | Tie Coat for C : | INTERGARD 263 | 1 | 75 | 7.60 | 8 hrs | 5 days | 379 | |
| (iv) | Tie Coat for D (if needed): | INTERSLEEK 737 | 1 | 100 | 6.5 | 4 hrs | 7 days | 325 | |
| C. ANTIFOULING (Tin Free - 5yr life) | | | | | | | | | |
| (i) | INTERSMOOTH 7460 | | 2 | 125 | 3.20 | 12 hrs | 28 days | 425 | |
| D. ANTIFOULING (FOUL RELEASE 5+ yr life) | | | | | | | | | |
| (i) | Standard | INTERSLEEK 757 | 1 | 150 | 4.80 | 24 hrs | | 325 | |
| (ii) | Alternative | INTERSLEEK 970 | 1 | 150 | 4.8 | 24 hrs | | 248 | |
| E. ANTIFOULING (Tin Free 3+ yr life) | | | | | | | | | |
| (i) | Standard: | INTERSPEED 6400 | 1 | 75 | 8.00 | 6 hrs | 3 months | 358 | |
| F. BOOTTOP ANTIFOULING (Tin Free) | | | | | | | | | |
| (i) | Standard: | INTERSPEED 6400 Black | 2 | 60 | 10.00 | 6 hrs | 3 months | 358 | 99-344-3990 |
| BOOTTOP ANTIFOULING (FOUL RELEASE) | | | | | | | | | |
| (i) | Standard | INTERSLEEK 757 | 1 | 150 | 4.80 | 24 hrs | | 325 | |
| (ii) | Alternative | INTERSLEEK 970 | 1 | 150 | 4.8 | 24 hrs | | 248 | |
| (iii) | Repair | INTERSLEEK RAPID Black | 1 | 150 | 4.0 | 24 hrs | | 350 | |
| G. A/W HULL & SUPERSTRUCTURE PRIMER (Re-blast) | | | | | | | | | |
| (i) | INTERGARD 5000 | | 1 | 150 | 5.47 | 12 hrs | 14 days | 179 | |

ANNEXE C
WHOLE SHIP SPECIFICATIONS
Proposed by

INTERNATIONAL PAINT LTD

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms Per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| H. <u>A/W HULL & SUPERSTRUCTURE PRIMER (Touch Up)</u> | | | | | | | |
| (i) INTERGARD 5000 Dawn Grey BS 4800 00A01 | 1 | 150 | 5.47 | 12 hrs | 14 days | 179 | 99-000-5256 |
| J. <u>A/W HULL & SUPERSTRUCTURE FINISH</u> | | | | | | | |
| (i) <u>Standard:</u> INTERFINE 691 HS BS 381C 676 | 1 | 50 | 10.6 | 8 hrs | # | 409 | 99-864-5322 |
| (ii) <u>Alternative:</u> INTERLAC 846 | 1 | 35 | 15.14 | 24 hrs | 4 days | 325 | 99-700-8410 |
| (iii) <u>Tie Coat (if required):</u> INTERPRIME 198 CPA098 | 1 | 35 | 11.71 | 24 hrs | 3 days | 419 | |
| K. <u>FLIGHT & WEATHERDECK SYSTEMS – DEF STAN 80-134</u> | | | | | | | |
| <u>(a) Hangar Doors</u> | | | | | | | |
| <u>Primer:</u> INTERGARD 5000 | 1 | 150 | 5.47 | 12 hrs | 14 days | 179 | 99-000-5256 |
| <u>Finish:</u> INTERFINE 691 HS Grey BS 381C 676 | 1 | 50 | 10.6 | 8 hrs | # | 409 | 99-864-5322 |
| <u>(b) Flightdeck - Type 2 Non-skid Finish</u> | | | | | | | |
| <u>Primer:</u> INTERGARD 5000 Dawn Grey BS 4800 00A01 | 1 | 150 | 5.47 | 12 hrs | 14 days | 179 | 99-000-5256 |
| <u>Finish:</u> INTERSHIELD 851 Extra Dark Sea Grey BS 381C 640 | 2 | 300 | 1.28 | 16 hrs | # | 169 | 99-391-0953 |
| <u>Type 2 Repair Kit:</u> Intershield 851 – Extra Dark Sea Grey (BS 381C 640) | | | | | | | 99-325-0579 |
| <u>(c) Hanger Deck & Weatherdeck - Type 1 Non-skid Finish:</u> | | | | | | | |
| <u>Primer:</u> INTERGARD 5000 Dawn Grey BS 4800 00A01 | 1 | 150 | 5.47 | 12 hrs | 14 days | 179 | 99-000-5256 |
| <u>Hanger Deck:</u> INTERSHIELD 852 Dark Admiralty Grey BS 381C 632 | 2 | 200 | 1.92 | 12 hrs | # | 134 | 99-149-8996 |
| <u>Weatherdeck:</u> INTERSHIELD 852 Extra Dark Sea Grey BS 381C 640 | 2 | 200 | 1.92 | 12 hrs | # | 134 | 99-583-1344 |
| <u>Type 1 Repair Kit:</u> Intershield 852 – Dark Admiralty Grey BS 381C 632 | | | | | | | 99-993-9328 |
| <u>(d) Gloss for Deck Margins:</u> INTERGARD 740 Extra Dark Sea Grey BS 381C 640 | 1 | 50 | 10.2 | 16 hrs | # | 420 | 99-182-2627 |

ANNEXE C
WHOLE SHIP SPECIFICATIONS
Proposed by

INTERNATIONAL PAINT LTD

| Proposed system Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|----------------------------|
| L. INTERIOR DRY COMPARTMENTS (Complete Represervation) | | | | | | | |
| (i) <u>Standard Primer:</u> INTERGARD 5000 Dawn Grey <u>Finish:</u> INTERCRYL 700 BS 4800 00A01 | 1 1 or 2 | 125 35 | 6.56 11.42 | 12 hrs 60 mins | # # | 179 18 | 99-000-5256 99-799-8832 |
| M. INTERIOR DRY COMPARTMENTS (Touch up) | | | | | | | |
| (i) <u>Standard Primer:</u> INTERGARD 5000 Dawn Grey <u>Finish:</u> INTERCRYL 700 BS 4800 00A01 | 1 1 or 2 | 125 35 | 6.56 11.42 | 12 hrs 60 mins | # # | 179 18 | 99-000-5256 99-799-8832 |
| N. INTERIOR WET COMPARTMENTS (Complete Represervation) | | | | | | | |
| (i) <u>Standard Primer:</u> INTERGARD 5000 Dawn Grey <u>Finish:</u> INTERGARD 1735 BS 4800 00A01 | 1 1 or 2 | 125 50 | 6.56 11.20 | 24 hrs 12 hrs | # # | 179 132 | 99-000-5256 99-255-0527 |
| (ii) <u>Citadel lobby Primer:</u> INTERGARD 5000 Dawn Grey <u>Finish:</u> INTERGARD 1735 Colour either: BS 4800 00A01 or Grey BS 381C 676 | 1 1 or 2 | 125 50 | 6.56 11.20 | 24 hrs 12 hrs | # # | 179 132 | 99-000-5256 99-255-0527 |
| (iii) <u>Cleansing Stations</u> <u>Primer:</u> INTERGARD 840 White <u>Finish:</u> INTERFINE 979 | 1 1 | 125 125 | 6.56 7.60 | 24 hrs 4 hrs | 4 days # | 134 165 | 99-279-8277 99-168-7337 |
| (iv) <u>Magazines Primer:</u> INTERGARD 5000 <u>Finish:</u> INTERGARD 1735 BS 4800 00A01 | 1 1 or 2 | 125 50 | 6.56 11.20 | 24 hrs 12 hrs | 4 days # | 179 132 | 99-000-5256 99-255-0527 |
| O. INTERIOR WET COMPARTMENTS (Touch up) | | | | | | | |
| (i) <u>Standard Primer:</u> INTERGARD 5000 Dawn Grey <u>Finish:</u> INTERGARD 1735 BS 4800 00A01 | 1 1 or 2 | 125 50 | 6.56 11.20 | 24 hrs 12 hrs | # # | 179 132 | 99-000-5256 99-255-0527 |
| (ii) <u>Citadel lobby Primer:</u> INTERGARD 5000 Dawn Grey <u>Finish:</u> INTERGARD 1735 Colour either: BS 4800 00A01 (or Grey BS 381C 676) | 1 1 or 2 | 125 50 | 6.56 11.20 | 24 hrs 12 hrs | # # | 179 132 | 99-000-5256 99-255-0527 |
| (iii) <u>Cleansing Stations</u> <u>Primer:</u> INTERGARD 840 White <u>Finish:</u> INTERFINE 979 | 1 1 | 125 125 | 6.56 7.60 | 24 hrs 4 hrs | 4 days # | 134 165 | 99-279-8277 99-168-7337 |
| (iv) <u>Magazines Primer:</u> INTERGARD 5000 Dawn Grey <u>Finish:</u> INTERGARD 1735 BS 4800 00A01 | 1 1 or 2 | 125 50 | 6.56 11.20 | 24 hrs 12 hrs | # # | 179 132 | 99-000-5256 99-255-0527 |

ANNEXE C
WHOLE SHIP SPECIFICATIONS
Proposed by

INTERNATIONAL PAINT LTD

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms Per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| P. <u>INTERIOR DECKS</u> | | | | | | | |
| (i) <u>Standard Primer:</u> INTERGARD 5000 Dawn Grey | 1 | 125 | 6.56 | 12 hrs | # | 179 | 99-000-5256 |
| <u>Finish:</u> INTERGARD 1735 BS 4800 Green 14C39 | 1 | 50 | 11.20 | 12 hrs | # | 132 | 99-483-1994 |
| (ii) <u>Cleansing Stations</u> | | | | | | | |
| <u>Standard Primer:</u> INTERGARD 840 White | 1 | 125 | 6.56 | 24 hrs | 4 days | 134 | 99-279-8277 |
| <u>Finish:</u> INTERFINE 979 BS 4800 Green 14C39 | 1 | 125 | 7.60 | 4 hrs | # | 165 | 99-729-7357 |
| Q. <u>BATTERY COMPARTMENTS</u> | | | | | | | |
| <u>Primer:</u> INTERGARD 5000 Dawn Grey | 1 | 125 | 6.56 | 12 hrs | # | 179 | 99-000-5256 |
| <u>Finish:</u> INTERGARD 1735 BS 4800 00A01 | 1 | 50 | 11.20 | 12 hrs | # | 132 | 99-255-0527 |
| R. <u>CABLE LOCKERS & COFFERDAMS</u> | | | | | | | |
| INTERGARD 5000 | 1 | 150 | 5.46 | 12hrs | 3 months | 179 | |
| S. <u>SEWAGE & WATER BALLAST TANKS.</u> | | | | | | | |
| <u>Water Ballast Tanks:</u> INTERGARD 5000 | 2 | 125 | 6.56 | 12 hrs | 3 months | 179 | |
| <u>Sewage Tanks:</u> INTERLINE 850 | 2 | 125 | 6.08 | 8 hrs | 30 days | 212 | |
| T. <u>MACHINERY SPACE BILGES</u> | | | | | | | |
| (i) <u>Standard:</u> INTERGARD 5000 White | 1 | 175 | 4.68 | 12 hrs | 3 months | 179 | |
| U. <u>AVCAT, DIESO, LUB & HYDRAULIC OIL TANKS SYSTEM</u> - DEF STAN 80-97 (HIGH SOLIDS) | | | | | | | |
| INTERLINE 850 | 2 | 125 | 6.08 | 8 hrs | 30 days | 212 | |
| V. <u>POTABLE WATER TANKS</u> | | | | | | | |
| INTERLINE 925 | 1 | 300 | 3.33 | 18 hrs | 3 days | 1 | |
| W. <u>AQUEOUS FILM-FORMING FOAM (AFFF) TANKS</u> | | | | | | | |
| INTERLINE 704 | 2 | 125 | 4.24 | 23 hrs | 21 days | 385 | |
| X. <u>DEMINERALISED WATER TANKS (Max Temperature 90°C)</u> | | | | | | | |
| INTERLINE 925 (up to 60° C only) | 1 | 300 | 3.33 | 18 hrs | 3 days | 1 | |

ANNEXE C
WHOLE SHIP SPECIFICATIONS
Proposed by

INTERNATIONAL PAINT LTD

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms Per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| Y. EPOXY HOLDING PRIMER | | | | | | | |
| (i) <u>Standard:</u> INTERGARD 269 | 1 | 30 | 15.67 | 6 hrs | # | 411 | 99-983-0743 |
| (ii) <u>Alternative & Maintenance:</u> INTERGARD 276 | 1 | 40 | 11.75 | 6 hrs | # | 411 | |
| Z. PRIMERS FOR NON-FERROUS METALS & FRP | | | | | | | |
| <u>Aluminium, Stainless steel, Zinc Spray or Galvanised surfaces:</u> | | | | | | | |
| <u>Standard:</u> INTERGARD 269 | 1 | 30 | 15.67 | 6 hrs | # | 411 | 99-983-0743 |
| <u>Alternative:</u> INTERGARD 276 | 1 | 40 | 11.75 | 6 hrs | # | 411 | |
| <u>Indicator Coat for FRP:</u> | | | | | | | |
| INTERLINE 925 | 1 | 200 | 5.0 | 18 hrs | 3 days | 1 | |

Notes:

1. The recoat intervals published above are based on the manufacturer's figures quoted for 25°C
2. The number of coats stated in the above table, relate to airless spray application to achieve the stated Nominal Dry Film Thickness (NDFT). Should brush application be required for touch up and repair then additional coats may be necessary to achieve the required NDFT.
3. It is important to ensure that surfaces are clean and free of contamination when overcoating materials, that have been left exposed, this is especially true for those products with an indefinite recoat interval.
4. # See Manufacturer's Technical Data Sheet/Application Instructions for requirements.
5. The Theoretical Spreading Rate (Theo SR) quoted in the table above is calculated from the coatings physical constants and makes no allowance for loss and assumes a totally smooth surface. The actual spreading rate achieved (Practical SR) is dependent upon many factors and in practice the factor used may vary from as little as 1.05 up to as much as 4+. It is usual for paint manufactures to use figures of 1.3 or 1.4 for estimating purposes but they always add the caveat that actual consumption achieved may vary due to such factors as surface profile, wastage due to material left in the can, weather conditions, skill of operator etc.
6. ~ = Use blast primer Y. when appropriate

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ANNEXE D
WHOLE SHIP SPECIFICATIONS
Proposed by

JOTUN PAINTS (EUROPE) LTD

| Proposed Systems /Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per litre | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-------------------|-------------------|
| <u>A. UNDERWATER PRIMER (Re-Blast)</u> | | | | | | | |
| (i) <u>Standard</u> : JOTACOTE UNIVERSAL (aluminium) | 1 | 200 | 3.6 | 4 hrs | # | 240 | |
| (ii) <u>Tie Coat</u> : SAFEGUARD UNIVERSAL ES | 1 | 100 | 6.2 | 10 hrs | 3 days | 330 | |
| <u>B. UNDERWATER PRIMER (T/U at Docking)</u> | | | | | | | |
| (i) <u>Standard</u> : JOTAMASTIC 87 ALUMINIUM | 1 | 175 | 5.0 | 10 hrs | # | 110 | 99-502-2684 |
| (ii) <u>Alternative</u> : JOTACOTE UNIVERSAL (aluminium) | 1 | 175 | 4.1 | 4 hrs | # | 240 | |
| (iii) <u>Tie Coat</u> : SAFEGUARD UNIVERSAL ES | 1 | 75 | 8.3 | 10 hrs | 3 days | 330 | |
| <u>C. ANTIFOULING (Tin Free - 5 yr life)</u> | | | | | | | |
| SEAQUANTUM PLUS | 1 | 125 | 3.8 | 7 hrs | # | 460 | |
| SEAQUANTUM ULTRA | 1 | 125 | 3.8 | 7 hrs | # | 460 | |
| SEAQUANTUM ULTRA | 1 | 125 | 3.8 | 7 hrs | # | 460 | |
| <u>D. FOUL RELEASE</u> | | | | | | | |
| SEALION TIECOAT | 1 | 90 | 6.6 | 15 hrs | 4 days | 406 | |
| SEALION REPULSE | 1 | 150 | 4.8 | # | # | 230 | |
| <u>E. ANTIFOULING (3 year life)</u> | | | | | | | |
| SEAFORCE 90 (light red) | 1 | 105 | 5.5 | 7 hrs | # | 370 | |
| SEAFORCE 90 (dark red) | 1 | 105 | 5.5 | 7 hrs | # | 370 | |
| <u>F. BOOTOP ANTIFOULING</u> | | | | | | | |
| (i) <u>Standard</u> : SEAQUANTUM CLASSIC (black) | 1 or 2 | 150 | 3.1 | 7 hrs | # | 460 | |
| (ii) <u>Alternative FRC</u> : | | | | | | | |
| SEALION TIECOAT | 1 | 90 | 6.6 | 15 hrs | 4 days | 406 | |
| SEALION REPULSE | 1 | 150 | 4.8 | # | # | 230 | |
| <u>G. A/W HULL & SUPERSTRUCTURE PRIMER (Re-blast)</u> | | | | | | | |
| (i) <u>Standard</u> : JOTACOTE UNIVERSAL (aluminium) | 1 | 200 | 3.6 | 4 hrs | # | 240 | |
| (ii) <u>Alternative</u> : JOTAMASTIC 80 (aluminium) | 1 | 200 | 4.0 | 10 hrs | # | 145 | |
| (iii) <u>Alternative</u> : WATERFINE PRIMER | 2 | 85 | 5.4 | 1.5 hrs | # | 60 | 99-462-9708 |
| <u>H. A/W HULL & SUPERSTRUCTURE PRIMER (T/U)</u> | | | | | | | |
| (i) <u>Standard</u> : JOTAMASTIC 80 (aluminium) | 1 | 150 | 5.3 | 10 hrs | # | 145 | |
| (ii) <u>Alternative</u> : JOTACOTE UNIVERSAL (aluminium) | 1 | 150 | 4.8 | 4 hrs | # | 240 | |
| (iii) <u>Alternative</u> : WATERFINE PRIMER | 2 | 70 | 6.6 | 1.5 hrs | # | 60 | 99-462-9708 |

ANNEXE D
WHOLE SHIP SPECIFICATIONS
Proposed by

JOTUN PAINTS (EUROPE) LTD

| <u>Proposed Systems /Materials</u> | <u>Number of Coats</u> | <u>NDFT per coat microns</u> | <u>Theo SR m²/litre</u> | <u>Min Recoat Interval</u> | <u>Max Recoat Interval</u> | <u>VOC gms per litre</u> | <u>NATO Stock Number</u> |
|--|------------------------|------------------------------|------------------------------------|----------------------------|----------------------------|--------------------------|--------------------------|
| <u>J. AW HULL & SUPERSTRUCTURE FINISH</u> | | | | | | | |
| (i) <u>Standard</u> : JOTAPROOF TOPCOAT (BS381C 676) | 1 or 2 | 60 | 10.5 | 4 hrs | # | 310 | 99-310-9229 |
| (ii) <u>Alternative</u> : CORREX (BS381C 676) | 1 | 40 | 12.0 | 14 hrs | # | 390 | |
| <u>Tie Coat for CORREX Finish</u> : VINYGUARD SILVERGREY 88 | 1 | 40 | 9.5 | 2 hrs | # | 530 | 99-212-5888 |
| <u>K. FLIGHT & WEATHERDECK SYSTEMS – DEF STAN 80-134</u> | | | | | | | |
| <u>(a) HANGAR DOORS</u> | | | | | | | |
| (i) <u>Standard Primer</u> : JOTAMASTIC 80 (aluminium) | 1 | 150 | 5.3 | 10 hrs | # | 145 | |
| (ii) <u>Alternative Primer</u> : JOTACOTE UNIVERSAL (aluminium) | 1 | 150 | 4.8 | 4 hrs | # | 240 | |
| (iii) <u>Alternative</u> : WATERFINE PRIMER | 2 | 70 | 6.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| (i) <u>Standard Finish</u> : JOTAPROOF TOPCOAT (BS381C 676) | 1 or 2 | 60 | 10.5 | 4 hrs | # | 310 | 99-310-9229 |
| (ii) <u>Alternative Finish</u> : CORREX (BS381C 676) | 1 | 40 | 12.0 | 14 hrs | # | 390 | |
| <u>Tie Coat for CORREX Finish</u> : VINYGUARD SILVERGREY 88 | 1 | 40 | 9.5 | 2 hrs | # | 530 | 99-212-5888 |
| <u>(b) FLIGHT DECK SYSTEM - TYPE 2 NON-SKID FINISH</u> | | | | | | | |
| <u>Primer</u> : JOTAMASTIC 87 | 1 | 150 | 5.5 | 10 hrs | # | 150 | 99-502-2684 |
| <u>Finish</u> : JOTA ARMOUR (BS381C 640) | 2 | 375 | 2.4 | 14 hrs | # | 70 | 99-226-7300 |
| <u>Type 2 Repair Kit</u> : JOTA ARMOUR REPAIR KIT (BS381C 640) | | | | | | | |
| <u>(c) HANGAR DECKS & WEATHERDECKS - TYPE 1 NON-SKID FINISH</u> | | | | | | | |
| <u>Primer</u> : JOTAMASTIC 87 | 1 | 150 | 5.5 | 10 hrs | # | 150 | 99-502-2684 |
| <u>Hangar Deck Finish</u> : JOTA ARMOUR FINE (BS381C 632) | 2 | 200 | | | | | |
| <u>Weatherdeck Finish</u> : JOTA ARMOUR FINE (BS381C 640) | 2 | 200 | | | | | |
| <u>Type 1 Repair Kit</u> : JOTA ARMOUR FINE REPAIR KIT (BS381C 640 or 632) | | | | | | | |
| <u>(d) Gloss for Deck Margins</u> | | | | | | | |
| JOTAPROOF TOPCOAT | 1 or 2 | 60 | 10.5 | 4 hrs | # | 310 | |
| <u>L. INTERIOR DRY SPACES (Complete Represervation)</u> | | | | | | | |
| (i) <u>Standard Primer</u> : WATERFINE ACRYLIC PRIMER | 1 | 80 | 5.8 | 1 hrs | # | 66 | |
| (ii) <u>Alternative Primer</u> : WATERFINE PRIMER | 1 | 80 | 5.8 | 1.5 hrs | # | 60 | 99-462-9708 |
| <u>Finish</u> : WATERFINE TOPCOAT (BS4800 00A01) | 1 or 2 | 40 | 9.2 | 8 hrs | # | 105 | 99-272-2784 |

ANNEXE D
WHOLE SHIP SPECIFICATIONS
Proposed by

JOTUN PAINTS (EUROPE) LTD

| <u>Proposed Systems /Materials</u> | Number of Coats | NDFT per coat microns | Theo SR m²/litre | Min Recoat Interval | Max Recoat Interval | VOC gms per litre | NATO Stock Number |
|--|--------------------------------|--------------------------------------|--|------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <u>M. INTERIOR DRY SPACES (Touch up)</u> | | | | | | | |
| (i) <u>Standard Primer:</u> WATERFINE ACRYLIC PRIMER | 1 | 80 | 5.8 | 1 hr | # | 66 | |
| (ii) <u>Alternative Primer:</u> WATERFINE PRIMER | 1 | 80 | 4.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| <u>Finish:</u> WATERFINE TOPCOAT (BS4800 00A01) | 1 or 2 | 40 | 9.2 | 8 hrs | # | 105 | 99-272-2784 |
| <u>N. INTERIOR WET SPACES (Complete Represervation)</u> | | | | | | | |
| <u>Primer:</u> WATERFINE PRIMER | 1 | 100 | 4.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| <u>Finish:</u> WATERFINE PRIMER (BS4800 00A01) | 1 or 2 | 40 | 11.6 | 1.5 hrs | # | 60 | |
| <u>Citadel Lobby Primer:</u> WATERFINE PRIMER | 1 | 80 | 5.8 | 1.5 hrs | # | 60 | 99-462-9708 |
| <u>Citadel Lobby Finish:</u> WATERFINE PRIMER (BS4800 00A01 or BS381C 676) | 1 or 2 | 40 | 11.6 | 1.5 hrs | # | 60 | |
| <u>Cleansing Stations Primer:</u> | | | | | | | |
| <u>Cleansing Stations Finish:</u> | | | | | | | |
| <u>Magazine Primer:</u> WATERFINE PRIMER | 1 | 100 | 4.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| <u>Magazine Finish:</u> WATERFINE PRIMER (BS4800 00A01) | 1 or 2 | 40 | 11.6 | 1.5 hrs | # | 60 | |
| <u>O. INTERIOR WET SPACES (Touch up)</u> | | | | | | | |
| <u>Primer:</u> WATERFINE PRIMER | 1 | 100 | 4.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| <u>Finish:</u> WATERFINE PRIMER (BS4800 00A01) | 1 or 2 | 40 | 11.6 | 1.5 hrs | # | 60 | |
| <u>Citadel Lobby Primer:</u> WATERFINE PRIMER | 1 | 100 | 4.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| <u>Citadel Lobby Finish:</u> WATERFINE PRIMER (BS4800 00A01 or BS381C 676) | 1 or 2 | 40 | 11.6 | 1.5 hrs | # | 60 | |
| <u>Cleansing Stations Primer:</u> | | | | | | | |
| <u>Cleansing Stations Finish:</u> | | | | | | | |
| <u>Magazine Primer:</u> WATERFINE PRIMER | 1 | 100 | 4.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| <u>Magazine Finish:</u> WATERFINE PRIMER (BS4800 00A01) | 1 or 2 | 40 | 11.6 | 1.5 hrs | # | 60 | |
| <u>P. INTERIOR DECKS</u> | | | | | | | |
| <u>Primer:</u> WATERFINE PRIMER | 1 | 100 | 4.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| <u>Finish:</u> WATERFINE PRIMER (BS4800 14C39) | 1 or 2 | 40 | 11.6 | 1.5 hrs | # | 60 | |
| <u>Cleansing Stations Primer:</u> | | | | | | | |
| <u>Cleansing Stations Finish:</u> | | | | | | | |

ANNEXE D
WHOLE SHIP SPECIFICATIONS
Proposed by

JOTUN PAINTS (EUROPE) LTD

| <u>Proposed Systems /Materials</u> | <u>Number of Coats</u> | <u>NDFT per coat microns</u> | <u>Theo SR m²/litre</u> | <u>Min Recoat Interval</u> | <u>Max Recoat Interval</u> | <u>VOC gms per litre</u> | <u>NATO Stock Number</u> |
|---|-------------------------------|-------------------------------------|---|-----------------------------------|-----------------------------------|---------------------------------|---------------------------------|
| <u>Q. BATTERY COMPARTMENTS</u> | | | | | | | |
| Primer: WATERFINE PRIMER (grey) | 1 | 100 | 4.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| Finish: WATERFINE PRIMER (BS4800 00A01) | 1 or 2 | 40 | 11.6 | 1.5 hrs | # | 60 | |
| <u>R. CABLE LOCKERS & COFFERDAMS</u> | | | | | | | |
| (i) Standard: JOTAMASTIC 80 | 1 | 175 | 4.6 | 10 hrs | # | 145 | |
| (ii) Alternative: JOTACOTE UNIVERSAL (aluminium) | 1 | 200 | 3.6 | 4 hrs | # | 240 | |
| <u>S. SEWAGE & WATER BALLAST TANKS</u> | | | | | | | |
| (i) <u>Water Ballast Tanks Standard:</u> | | | | | | | |
| BALLOXY HB LIGHT | 1 | 160 | 5.1 | 10 hrs | # | 150 | |
| BALLOXY HB LIGHT | 1 | 160 | 5.1 | 10 hrs | # | 150 | |
| (ii) <u>Water Ballast Tank Alternative:</u> | | | | | | | |
| JOTACOTE UNIVERSAL | 1 | 160 | 4.5 | 4 hrs | # | 240 | |
| JOTACOTE UNIVERSAL | 1 | 160 | 4.5 | 4 hrs | # | 240 | |
| (i) <u>Sewage Tanks Standard:</u> | | | | | | | |
| TANKGUARD STORAGE | 1 | 150 | 4.2 | 10 hrs | 30 days | 310 | |
| TANKGUARD STORAGE | 1 | 150 | 4.2 | 10 hrs | 30 days | 310 | |
| (ii) <u>Sewage Tanks Alternative:</u> | | | | | | | |
| TANKGUARD DW | 1 | 150 | 6.7 | 12 hrs | 5 days | 2 | |
| TANKGUARD DW | 1 | 150 | 6.7 | 12 hrs | 5 days | 2 | |
| <u>T. MACHINERY SPACE BILGES</u> | | | | | | | |
| Primer: JOTACOTE UNIVERSAL (aluminium) | 1 | 125 | 5.8 | 4 hrs | # | 240 | |
| Finish: JOTAPROOF TOPCOAT (BS4800 00A01) | 1 | 60 | 10.5 | 4 hrs | # | 310 | |
| <u>U. AVCAT. DIESEL LUB & HYDRAULIC OIL TANKS SYSTEM</u> <u>DEF STAN 80-97 (HIGH SOLIDS)</u> | | | | | | | |
| TANKGUARD STORAGE | 1 | 125 | 5.0 | 10 hrs | 30 days | 310 | |
| TANKGUARD STORAGE | 1 | 125 | 5.0 | 10 hrs | 30 days | 310 | |
| <u>V. POTABLE WATER TANKS</u> | | | | | | | |
| TANKGUARD DW | 1 | 150 | 6.7 | 12 hrs | 5 days | 2 | |
| TANKGUARD DW | 1 | 150 | 6.7 | 12 hrs | 5 days | 2 | |
| <u>W. AQUEOUS FILM-FORMING FOAM (AFFF) TANKS</u> | | | | | | | |
| TANKGUARD DW | 1 | 150 | 6.7 | 12 hrs | 5 days | 2 | |
| TANKGUARD DW | 1 | 150 | 6.7 | 12 hrs | 5 days | 2 | |

ANNEXE D
WHOLE SHIP SPECIFICATIONS
Proposed by

JOTUN PAINTS (EUROPE) LTD

| <u>Proposed Systems /Materials</u> | <u>Number of Coats</u> | <u>NDFT per coat microns</u> | <u>Theo SR m²/litre</u> | <u>Min Recoat Interval</u> | <u>Max Recoat Interval</u> | <u>VOC gms per litre</u> | <u>NATO Stock Number</u> |
|---|------------------------|------------------------------|------------------------------------|----------------------------|----------------------------|--------------------------|--------------------------|
| <u>X. DEMINERALISED WATER TANKS (Max Temperature 90°C)</u> | | | | | | | |
| TANKGUARD STORAGE | 1 | 125 | 5.0 | 10 hrs | 30 days | 310 | |
| TANKGUARD STORAGE | 1 | 125 | 5.0 | 10 hrs | 30 days | 310 | |
| TANKGUARD STORAGE | 1 | 125 | 5.0 | 10 hrs | 30 days | 310 | |
| <u>Y. EPOXY HOLDING PRIMER</u> | | | | | | | |
| MUKI EPS | 1 | 20 | 12.5 | 7 hrs | | 610 | |
| <u>Z. PRIMERS FOR NON-FERROUS METALS</u> | | | | | | | |
| (i) <u>Aluminium Standard</u> : WATERFINE PRIMER | 1 | 60 | 7.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| (ii) <u>Stainless Steel Standard</u> : WATERFINE PRIMER | 1 | 60 | 7.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| (iii) <u>Zinc Spray / Galvanise Standard</u> : WATERFINE PRIMER | 1 | 60 | 7.6 | 1.5 hrs | # | 60 | 99-462-9708 |
| (iv) <u>FRP Indicator Coat</u> : PENGUARD HB (White) | 1 | 100 | 5.4 | 8 hrs | # | 390 | |

NOTES:-

1. The recoat intervals published above are based on the Manufacturer's figures quoted for 23°C
2. The number of coats stated in the above table, relate to airless spray application to achieve the stated Nominal Dry Film Thickness (NDFT). Should brush application be required for touch up and repair then additional coats may be necessary to achieve the required NDFT.
3. # = See Manufacturer's Technical Data Sheet / Application instructions for requirements.
4. It is important to ensure that surfaces are clean and free of contamination when overcoating materials, that have been left exposed, this is especially true for those products with an indefinite recoat interval.
5. The Theoretical Spreading Rate (Theo SR) quoted in the table above, per coat, is calculated from the coatings physical constants and makes no allowance for loss and assumes a totally smooth surface. The actual spreading rate achieved (Practical SR) is dependent upon many factors and in practice the factor used may vary from as little as 1.05 up to as much as 4+. It is usual for Paint Manufacturers to use figures of 1.3 or 1.4 for estimating purposes but they always add the caveat that actual consumption achieved may vary due to such factors as surface profile, wastage due to material left in the can, weather conditions, skill of operator etc.
6. ~ = Use blast primer Y. when appropriate

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ANNEXE E
WHOLE SHIP SPECIFICATION
Proposed by

MAKER COATING SYSTEMS LTD.
Incorporating: PPG, Ameron, Sigma & CORROLESS

| Proposed Systems/Materials | | | | Number of Coats | NDFT per coat microns | Theo SR m²/litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|---------------------------------|------|---|-----------------|-----------------------|------------------|---------------------|---------------------|----------------------------|-------------------|
| <u>A. UNDERWATER PRIMER (Re-blast)</u> | | | | | | | | | | |
| (i) <u>Standard:</u> | SIGMASHIELD 220 | 7922 | 1 | 125 | 6.4 | 3½ hrs | 14 days | 262 | 99-403-5015 99-723-3658 | |
| | SIGMASHIELD 420 | 7951 | 1 | 150 | 5.6 | 3½ hrs | 14 days | 239 | | |
| (ii) <u>Tie Coat:</u> | SIGMACOVER 525 | 7902 | 1 | 100 | 6.1 | 12hrs | 14 days | 365 | | |
| <u>B. UNDERWATER PRIMER (T/U at Docking)</u> | | | | | | | | | | |
| (i) <u>Standard:</u> | SIGMASHIELD 220 | 7922 | 1 | 125 | 6.4 | 3½hrs | 14 days | 262 | 99-403-5015 99-723-3658 | |
| | SIGMASHIELD 420 | 7951 | 1 | 150 | 5.6 | 3½hrs | 14 days | 239 | | |
| (ii) <u>Tie Coat:</u> | SIGMACOVER 525 | 7902 | 1 | 100 | 6.1 | 12hrs | 14 days | 365 | | |
| <u>C. ANTIFOULING (Tin Free >5yr life)</u> | | | | | | | | | | |
| | SIGMA ECOFLEET 530 (red brown) | 7385 | 1 | 110 | 5.4 | 6hrs | # | 339 | | |
| | SIGMA ECOFLEET 530 (brown) | 7385 | 1 | 110 | 5.4 | 6hrs | # | 339 | | |
| | SIGMA ECOFLEET 530 (red brown) | 7385 | 1 | 110 | 5.4 | 6hrs | # | 339 | | |
| <u>D. ANTIFOULING (FOUL RELEASE 5+ yr life)</u> | | | | | | | | | | |
| (i) <u>Standard</u> | SIGMACOVER 295 | 7947 | 1 | 100 | 5.5 | 16hrs | 10 days | 436 | | |
| | SIGMASHIELD 610 | 7978 | 1 | 150 | 3.8 | 12hrs | 5 days | 436 | | |
| | SIGMAGLIDE 790 | 7386 | 1 | 150 | 5.3 | 12hrs | 5 days | 187 | | |
| | SIGMAGLIDE 890 | 7399 | 1 | 150 | 3.4 | 20mins | # | | | |
| (ii) <u>Alternative</u> | SIGMACOVER 295 | 7947 | 1 | 100 | 5.5 | 16hrs | 10 days | 436 | | |
| | SIGMASHIELD 610 | 7978 | 1 | 150 | 3.8 | 12hrs | 5 days | 436 | | |
| | SIGMAGLIDE 790 | 7386 | 1 | 150 | 5.3 | 12hrs | 5 days | 187 | | |
| | SIGMAGLIDE 990 | 7397 | 1 | 180 | 4.4 | 2 hrs | # | 248 | | |
| <u>E. ANTIFOULING (Tin Free 3+ yr life)</u> | | | | | | | | | | |
| | SIGMA ECOFLEET 530 (red brown) | 7385 | 1 | 110 | 5.4 | 6hrs | # | 339 | | |
| | SIGMA ECOFLEET 530 (brown) | 7385 | 1 | 110 | 5.4 | 6hrs | # | 339 | | |
| <u>F. BOOTTOP ANTIFOULING (Tin Free)</u> | | | | | | | | | | |
| | SIGMA ECOFLEET 530 (black) | 7385 | 1 | 110 | 5.4 | 6hrs | # | 339 | | |
| <u>G. A/W HULL & SUPERSTRUCTURE PRIMER (Reblast)</u> | | | | | | | | | | |
| (i) <u>Standard:</u> | AMERLOCK 400C | | 1 | 125 | 7 | 16hrs | # | 106 | 99-974-7400 | |
| (ii) <u>Alternative:</u> | SIGMA AQUACOVER 25 | 7150 | 2 | 75 | 6.6 | 4hrs | # | 37 | 99-321-6318 | |
| <u>H. A/W HULL & SUPERSTRUCTURE PRIMER (Touch Up)</u> | | | | | | | | | | |
| (i) <u>Standard:</u> | AMERLOCK 400C | | 1 | 125 | 7 | 16hrs | # | 106 | 99-974-7400 | |
| (ii) <u>Alternative:</u> | SIGMASHIELD 220 | 7922 | 1 | 125 | 6.4 | 3½hrs | 14 days | 262 | 99-403-5015 | |

ANNEXE E
WHOLE SHIP SPECIFICATION
Proposed by

MAKER COATING SYSTEMS LTD.
Incorporating: PPG, Ameron, Sigma & CORROLESS

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m²/litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|------------------|---------------------|---------------------|-----------------|-------------------|
| J. <u>A/W HULL& SUPERSTRUCTURE FINISH</u> | | | | | | | |
| (I) <u>Standard:</u> SIGMADUR 540 Lt Weatherwork Grey BS381C 676 | | | | | | | |

ANNEXE E
WHOLE SHIP SPECIFICATION
Proposed by

MAKER COATING SYSTEMS LTD.
Incorporating: PPG, Ameron, Sigma & CORROLESS

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| <u>N. INTERIOR WET COMPARTMENTS (Complete Represervation)</u> | | | | | | | |
| (i) <u>Standard Primer:</u> AMERLOCK 400C | 1 | 100 | 7 | 16hrs | # | 106 | 99-974-7400 |
| <u>Finish:</u> AMERLOCK 400C BS4800 00A01 | 1 | 100 | 7 | 16hrs | # | 106 | 99-958-6062 |
| (ii) <u>Citadel lobby - Primer:</u> AMERLOCK 400C | 1 | 100 | 7 | 16hrs | # | 106 | 99-974-7400 |
| <u>Finish:</u> AMERLOCK 400C - Colour either: BS4800 00A01 or Grey BS381C 676 | 1 | 100 | 7 | 16hrs | # | 106 | 99-958-6062 |
| (iii) <u>Cleansing Stations - Primer:</u> AMERLOCK 400C | 1 | 125 | 7 | 16hrs | # | 106 | 99-974-7400 |
| <u>Finish:</u> AMERON PSX 700 White | 1 | 125 | 7.2 | 4.5hrs | # | 120 | 17-113-5689 |
| (iv) <u>Magazines - Primer:</u> AMERLOCK 400C | 1 | 100 | 7 | 16hrs | # | 106 | 99-974-7400 |
| <u>Finish:</u> AMERLOCK 400C BS4800 00A01 | 1 | 100 | 7 | 16hrs | # | 106 | 99-958-6062 |
| <u>O. INTERIOR WET COMPARTMENTS (touch-up)</u> | | | | | | | |
| (i) <u>Standard Primer:</u> AMERLOCK 400C | 1 | 100 | 7 | 16hrs | # | 106 | 99-974-7400 |
| <u>Finish:</u> AMERLOCK 400C BS4800 00A01 | 1 | 100 | 7 | 16hrs | # | 106 | 99-958-6062 |
| (ii) <u>Citadel lobby - Primer:</u> AMERLOCK 400C | 1 | 100 | 7 | 16hrs | # | 106 | 99-974-7400 |
| <u>Finish:</u> AMERLOCK 400C colours - BS4800 00A01 or Grey BS381C 676 | 1 | 100 | 7 | 16hrs | # | 106 | 99-958-6062 |
| (iii) <u>Cleansing Stations - Primer:</u> AMERLOCK 400C | 1 | 125 | 7 | 16hrs | # | 106 | 99-974-7400 |
| <u>Finish:</u> AMERON PSX 700 White | 1 | 125 | 7.2 | 4.5hrs | # | 120 | 17-113-5689 |
| (iv) <u>Magazines - Primer:</u> AMERLOCK 400C | 1 | 100 | 7 | 16hrs | # | 106 | 99-974-7400 |
| <u>Finish:</u> AMERLOCK 400C BS4800 00A01 | 1 | 100 | 7 | 16hrs | # | 106 | 99-958-6062 |
| <u>P. INTERIOR DECKS</u> | | | | | | | |
| (i) <u>Standard Primer:</u> AMERLOCK 400C | 1 | 125 | 7 | 16 hrs | # | 106 | 99-974-7400 |
| <u>Finish:</u> AMERCOAT 300A BS4800 14C39 | 1 | 50 | 10.4 | 16 hrs | # | 0 | 17-113-5690 |
| (ii) <u>Cleansing Stations - Primer:</u> AMERLOCK 400C | 1 | 125 | 7 | 16hrs | # | 106 | 99-974-7400 |
| <u>Finish:</u> AMERON PSX 700 BS4800 14C39 | 2 | 125 | 7.2 | 4.5hrs | # | 120 | 17-113-6169 |
| <u>Q. BATTERY COMPARTMENTS</u> | | | | | | | |
| (i) <u>Primer:</u> AMERLOCK 400C | 1 | 100 | 7 | 16hrs | # | 106 | 99-974-7400 |
| (ii) <u>Finish:</u> AMERLOCK 400C BS4800 00A01 | 1 | 100 | 7 | 16hrs | # | 106 | 99-958-6062 |
| <u>R. CABLE LOCKERS & COFFERDAMS</u> | | | | | | | |
| SIGMAGUARD CSF 650 7443 | 1 | 300 | 3.3 | 24hrs | 20days | 143 | |
| <u>S. SEWAGE & WATER BALLAST TANKS.</u> | | | | | | | |
| <u>Water Ballast Tanks:</u> CORROLESS EPF | 1 | 200 | 4.8 | 16hrs | # | 80 | 25-150-0972 |
| CORROLESS RF35 | 1 | 200 | 4.8 | 16hrs | # | 93 | 99-337-0778 |
| <u>Sewage Tanks:</u> CORROLESS EPF | 1 | 200 | 4.8 | 16hrs | # | 80 | 25-150-0972 |
| CORROLESS RF35 | 1 | 200 | 4.8 | 16hrs | # | 93 | 99-337-0778 |
| <u>Alternative:</u> SIGMAGUARD CSF650 7443 | 1 | 300 | 3.3 | 24hrs | 20days | 143 | |

ANNEXE E
WHOLE SHIP SPECIFICATION
Proposed by

MAKER COATING SYSTEMS LTD.
Incorporating: PPG, Ameron, Sigma & CORROLESS

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| <u>T. MACHINERY SPACE BILGES</u> | | | | | | | |
| AMERLOCK 400C WHITE | 2 | 125 | 7 | 16hrs | # | 106 | 17-108-8248 |
| <u>U. AVCAT. DIESEL LUB & HYDRAULIC OIL TANKS SYSTEM</u> <u>DEF-STAN 80-97 (HIGH SOLIDS)</u> | | | | | | | |
| CORROLESS EPF | 1 | 200 | 4.8 | 16 hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 | 1 | 200 | 4.8 | 16hrs | 3 days | 93 | 25-150-0973 |
| <u>V. POTABLE WATER TANKS</u> | | | | | | | |
| CORROLESS EPF | 1 | 200 | 4.8 | 16hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 | 1 | 200 | 4.8 | 16hrs | 3 days | 93 | 99-337-0778 |
| <u>W. AQUEOUS FOAM FORMING FLUID (AFFF) TANKS</u> | | | | | | | |
| (i) <u>Standard</u> CORROLESS EPF | 1 | 200 | 4.8 | 16hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 | 1 | 200 | 4.8 | 16hrs | 3 days | 93 | 99-337-0778 |
| (ii) <u>Alternative:</u> SIGMAGUARD CSF 650 7443 | 1 | 300 | 3.3 | 24hrs | 20days | 143 | |
| <u>X. DEMINERALISED WATER TANKS (Max Temperature 90°C)</u> | | | | | | | |
| (i) <u>Standard</u> CORROLESS EPF | 1 | 200 | 4.8 | 16hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 | 1 | 200 | 4.8 | 16hrs | 3 days | 93 | 99-337-0778 |
| (ii) <u>Alternative:</u> SIGMAGUARD CSF 650 7443 | 1 | 300 | 3.3 | 24hrs | 20days | 143 | |
| <u>Y. EPOXY HOLDING PRIMER</u> | | | | | | | |
| SIGMACOVER 280 7417 | 1 | 50 | 11.4 | 8hrs | 6 months | 432 | 99-569-7697 |
| <u>Z. PRIMERS FOR NON-FERROUS METALS & FRP</u> | | | | | | | |
| (i) <u>Aluminium:</u> AMERLOCK 400C | 1 | 125 | 7 | 16hrs | # | 106 | 99-974-7400 |
| (ii) <u>Stainless Steel:</u> SIGMACOVER 280 | 1 | 50 | 11.4 | 8hrs | # | 432 | |
| (iii) <u>Zinc Spray:</u> AMERLOCK 400C | 1 | 125 | 7 | 16hrs | # | 106 | 99-974-7400 |
| (iv) <u>Galvanise:</u> AMERLOCK 400C | 1 | 125 | 7 | 16hrs | # | 106 | 99-974-7400 |
| (v) <u>Indicator coat for FRP:</u> AMERLOCK 400C Green Ral 6011 | 1 | 125 | 7 | 16hrs | # | 106 | 17-120-4829 |

ANNEXE E
WHOLE SHIP SPECIFICATION
Proposed by

MAKER COATING SYSTEMS LTD.
Incorporating: PPG, Ameron, Sigma & CORROLESS

Notes:

1. The recoat intervals published above are based on the manufacturer's figures quoted for 20°C
2. The number of coats stated in the above table, relate to airless spray application to achieve the stated Nominal Dry Film Thickness (NDFT). Should brush application be required for touch up and repair then additional coats may be necessary to achieve the required NDFT.
3. # = No maximum recoat interval, see Manufacturer's Technical Data Sheet/Application Instructions for requirements.
4. It is important to ensure that surfaces are clean and free of contamination when overcoating materials, that have been left exposed, this is especially true for those products with an indefinite recoat interval.
5. The Theoretical Spreading Rate (TSR) quoted in the table above is calculated from the coatings physical constants and makes no allowance for loss and assumes a totally smooth surface. The actual spreading rate achieved Practical Spreading Rate (PSR) is dependent upon many factors and in practice the factor used may vary from as little as 1.05 up to as much as 4+. It is usual for paint manufactures to use figures of 1.3 or 1.4 for estimating purposes but they always add the caveat that actual consumption achieved may vary due to such factors as surface profile, wastage due to material left in the can, weather conditions, skill of operator etc.
6. ~ = Use blast primer Y. when appropriate

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ANNEXE F
WHOLE SHIP SPECIFICATIONS
Proposed by

PPG PROTECTIVE & MARINE COATINGS

| Proposed Systems/Materials | | | | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|---------------------------------|------|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|----------------------------|-------------------|
| A. UNDERWATER PRIMER (Re-blast) ~ | | | | | | | | | | |
| (i) <u>Standard</u> : | SIGMASHIELD 220 | 7922 | 1 | 125 | 6.4 | 3½ hrs | 14 days | 262 | 99-403-5015 99-723-3658 | |
| | SIGMASHIELD 420 | 7951 | 1 | 150 | 5.6 | 3½ hrs | 14 days | 239 | | |
| (ii) <u>Tie Coat</u> : | SIGMACOVER 525 | 7902 | 1 | 100 | 6.1 | 12 hrs | 14 days | 365 | | |
| B. UNDERWATER PRIMER (T/U at Docking) | | | | | | | | | | |
| (i) <u>Standard</u> : | SIGMASHIELD 220 | 7922 | 1 | 125 | 6.4 | 3½ hrs | 14 days | 262 | 99-403-5015 99-723-3658 | |
| | SIGMASHIELD 420 | 7951 | 1 | 150 | 5.6 | 3½ hrs | 14 days | 239 | | |
| (ii) <u>Tie Coat</u> : | SIGMACOVER 525 | 7902 | 1 | 100 | 6.1 | 12 hrs | 14 days | 365 | | |
| C. ANTIFOULING (Tin Free - 5yr life) | | | | | | | | | | |
| | SIGMA ECOFLEET 530 (red brown) | 7385 | 1 | 110 | 5.4 | 6 hrs | # | 339 | | |
| | SIGMA ECOFLEET 530 (brown) | 7385 | 1 | 110 | 5.4 | 6 hrs | # | 339 | | |
| | SIGMA ECOFLEET 530 (red brown) | 7385 | 1 | 110 | 5.4 | 6 hrs | # | 339 | | |
| D. ANTIFOULING (FOUL RELEASE 5+ yr life) | | | | | | | | | | |
| (i) <u>Standard</u> | | | | | | | | | 99-403-5015 | |
| | SIGMASHIELD 220 | 7922 | 1 | 125 | 6.4 | 3½ hrs | 14 days | 262 | | |
| | SIGMASHIELD 610 | 7978 | 1 | 150 | 3.8 | 12 hrs | 5 days | 437 | | |
| | SIGMAGLIDE 790 | 7386 | 1 | 150 | 5.3 | 12 hrs | 5 days | 187 | | |
| | SIGMAGLIDE 890 | 7399 | 1 | 150 | 3.4 | 20 mins | # | 215 | | |
| (ii) <u>Alternative</u> : | | | | | | | | | | |
| | SIGMACOVER 250 | 7497 | 1 | 125 | 4.6 | 8 hrs | 3 months | 436 | | |
| | SIGMASHIELD 610 | 7978 | 1 | 150 | 3.8 | 12 hrs | 5 days | 437 | | |
| | SIGMAGLIDE 790 | 7386 | 1 | 150 | 5.3 | 12 hrs | 5 days | 187 | | |
| | SIGMAGLIDE 990 | 7397 | 1 | 150 | 4.4 | 2HRS | # | 248 | | |
| E. ANTIFOULING (Tin Free 3+ yr life) | | | | | | | | | | |
| | SIGMA ECOFLEET 530 (red brown) | 7385 | 1 | 110 | 5.4 | 6 hrs | # | 339 | | |
| | SIGMA ECOFLEET 530 (brown) | 7385 | 1 | 110 | 5.4 | 6 hrs | # | 339 | | |
| F. BOOTTOP ANTIFOULING (Tin Free) | | | | | | | | | | |
| | SIGMA ECOFLEET 530 (black) | 7385 | 1 | 110 | 5.4 | 6 hrs | # | 339 | | |
| G. A/W HULL & SUPERSTRUCTURE PRIMER (Reblast) | | | | | | | | | | |
| (i) <u>Standard</u> : | SIGMACOVER 456 HS | 7712 | 2 | 125 | 5.8 | 8 hrs | # | 227 | 99-321-6318 | |
| (ii) <u>Alternative</u> : | SIGMA AQUACOVER 25 | 7150 | 2 | 75 | 6.6 | 4 hrs | # | 31 | | |

ANNEXE F
WHOLE SHIP SPECIFICATIONS
Proposed by

PPG PROTECTIVE & MARINE COATINGS

| <u>Proposed Systems/Materials</u> | Number of Coats | NDFT per coat microns | Theo SR m²/litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|------------------------|------------------------------|------------------------------------|----------------------------|----------------------------|------------------------|--------------------------|
| H. A/W HULL & SUPERSTRUCTURE PRIMER (Touch Up) | | | | | | | |
| (i) <u>Standard:</u> SIGMACOVER 456 HS 7712 | 1 | 125 | 5.8 | 8 hrs | # | 227 | 99-403-5015 |
| (ii) <u>Alternative</u> SIGMASHIELD 220 7922 | 1 | 150 | 5.3 | 3½ hrs | 14 days | 262 | |
| J. A/W HULL & SUPERSTRUCTURE FINISH | | | | | | | |
| (i) <u>Standard:</u> SIGMADUR 540 7740 BS 381C 676 Light Weatherwork Grey | 1 | 60 | 9.0 | 8 hrs | # | 411 | 99-236-5744 |
| (ii) <u>Alternative:</u> SIGMA AQUACOVER 45 7250 | 1 | 50 | 6.8 | 6 hrs | # | 10 | |
| (iii) <u>Tie Coat: (if required for Silicone Alkyd Finish)</u> | | | | | | | |
| (iv) <u>Sealer for RASH:</u> SIGMACOVER 566 7454 | 1 | 75 | 5.7 | 6 hrs | # | 494 | |
| K. FLIGHT & WEATHERDECK SYSTEMS – DEF STAN 80-134 | | | | | | | |
| <u>(a) Hangar Doors</u> | | | | | | | |
| <u>Primer:</u> SIGMACOVER 456 HS 7712 | 2 | 75 | 9.7 | 8 hrs | # | 277 | 411 |
| <u>Finish:</u> SIGMADUR 540 7740 | 1 | 50 | 12 | 8 hrs | # | 411 | |
| <u>(b) Flight Deck - Type 2 Non-skid Finish</u> | | | | | | | |
| <u>Primer:</u> SIGMARITE FLIGHT DECK PRIMER 7937 | 1 | 200 | 3.9 | 8 hrs | 14 days | 216 | 192 |
| <u>Finish:</u> SIGMARITE FLIGHT DECK COATING 7969 Extra Dark Sea Grey BS 381C 640 | 2 | 800 | 1.0 | 8 hrs | 28 days | 192 | |
| <u>Type 2 Repair Kit:</u> | | | | | | | |
| <u>(c) Hangar Deck & Weatherdeck - Type 1 Non-Skid Finish</u> | | | | | | | |
| <u>Primer:</u> SIGMARITE FLIGHT DECK PRIMER 7937 | 1 | 200 | 3.9 | 8 hrs | 14 days | 216 | 227 |
| <u>Hangar Deck:</u> Dark Admiralty Grey BS 381C 632 | | | | | | | |
| <u>Weatherdeck:</u> Extra Dark Sea Grey BS 381C 640 | | | | | | | |
| <u>Type 1 Repair Kit:</u> | | | | | | | |
| <u>(d) Gloss for Deck Margins:</u> | | | | | | | |
| L. INTERIOR DRY SPACES (Complete Represervation) | | | | | | | |
| (i) <u>Standard:</u> <u>Primer</u> SIGMA AQUACOVER 25 7150 | 1 | 75 | 6.6 | 4 hrs | # | 31 | 99-321-6318 |
| <u>Finish</u> SIGMA AQUACOVER 45 7250 BS 4800 00A01 | 1 | 50 | 6.8 | 6 hrs | # | 17 | |
| (ii) <u>Alternative:</u> <u>Primer</u> SIGMACOVER 456 HS 7712 | 1 | 75 | 9.7 | 8 hrs | # | 227 | 99-277-8693 |
| <u>Finish</u> SIGMA AQUACOVER 45 7250 BS 4800 00A01 | 1 | 50 | 6.8 | 6 hrs | # | 17 | |

ANNEXE F
WHOLE SHIP SPECIFICATIONS
Proposed by

PPG PROTECTIVE & MARINE COATINGS

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m²/litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|------------------|---------------------|---------------------|-----------------|-------------------|
| M. INTERIOR DRY SPACES (Touch up) | | | | | | | |
| (i) <u>Standard</u> <u>Primer:</u> SIGMA AQUACOVER 25 7150 | 1 | 75 | 6.6 | 4 hrs | # | 31 | 99-321-6318 |
| <u>Finish:</u> SIGMA AQUACOVER 45 7250 BS 4800 00A01 | 1 | 50 | 6.8 | 6 hrs | # | 17 | 99-277-8693 |
| (ii) <u>Alternative</u> <u>Primer:</u> SIGMACOVER 456 HS 7712 | 1 | 75 | 9.7 | 8 hrs | # | 227 | 99-277-8693 |
| <u>Finish:</u> SIGMA AQUACOVER 45 7250 BS 4800 00A01 | 1 | 50 | 6.8 | 6 hrs | # | 17 | |
| N. INTERIOR WET SPACES (Complete Represervation) | | | | | | | |
| (i) <u>Standard</u> <u>Primer:</u> SIGMACOVER 456 HS 7712 | 1 | 75 | 9.7 | 8 hrs | # | 227 | 99-549-3974 |
| <u>Finish:</u> SIGMASHIELD 420 7951 BS 4800 00A01 | 1 | 125 | 6.5 | 3½ hrs | 14 days | 212 | |
| (ii) <u>Citadel lobby</u> <u>Primer:</u> SIGMACOVER 456 HS 7712 | 1 | 75 | 9.7 | 8 hrs | # | 227 | 99-549-3974 |
| <u>Finish:</u> SIGMASHIELD 420 7951 colour either BS 4800 00A01 or Grey BS 381C 676 | 1 | 150 | 5.6 | 3½ hrs | 14 days | 212 | |
| (iii) <u>Magazine</u> <u>Primer:</u> SIGMACOVER 456 HS 7712 | 1 | 75 | 9.7 | 8 hrs | # | 227 | 99-549-3974 |
| <u>Finish:</u> SIGMASHIELD 420 7951 BS 4800 00A01 | 1 | 150 | 5.6 | 3½ hrs | 14 days | 212 | |
| (iv) <u>Cleansing Stations</u> <u>Primer:</u> SIGMAGUARD CSF 650 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| <u>Finish:</u> SIGMAGUARD CSF 650 7443 White | 1 | 330 | 3.3 | 24 hrs | 20 days | 17 | |
| O. INTERIOR WET SPACES (Touch up) | | | | | | | |
| (i) <u>Standard</u> <u>Primer:</u> SIGMACOVER 456 HS 7712 | 1 | 75 | 9.7 | 8 hrs | # | 227 | 99-549-3974 |
| <u>Finish:</u> SIGMASHIELD 420 7951 BS 4800 00A01 | 1 | 125 | 6.5 | 3½ hrs | 14 days | 212 | |
| (ii) <u>Citadel lobby</u> <u>Primer:</u> SIGMACOVER 456 HS 7712 | 1 | 75 | 9.7 | 8 hrs | # | 227 | 99-549-3974 |
| <u>Finish:</u> SIGMASHIELD 420 7951 colour either BS 4800 00A01 or Grey BS 381C 676 | 1 | 150 | 5.6 | 3½ hrs | 14 days | 212 | |
| (iii) <u>Magazine</u> <u>Primer:</u> SIGMACOVER 456 HS 7712 | 1 | 75 | 9.7 | 8 hrs | # | 227 | 99-549-3974 |
| <u>Finish:</u> SIGMASHIELD 420 7951 BS 4800 00A01 | 1 | 150 | 5.6 | 3½ hrs | 14 days | 212 | |
| (iv) <u>Cleansing Stations</u> <u>Primer:</u> SIGMAGUARD CSF 650 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| <u>Finish:</u> SIGMAGUARD CSF 650 7443 White | 1 | 330 | 3.3 | 24 hrs | 20 days | 17 | |
| P. INTERIOR DECKS | | | | | | | |
| (i) <u>Standard</u> <u>Primer:</u> SIGMACOVER 456 HS 7712 | 1 | 75 | 9.7 | 8 hrs | # | 227 | 99-269-1301 |
| <u>Finish:</u> SIGMA AQUACOVER 45 7250 BS 4800 Green 14C39 | 1 | 125 | 6.7 | 6 hrs | # | 17 | |
| (ii) <u>Cleansing Stations</u> <u>Primer:</u> SIGMAGUARD CSF 650 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| <u>Finish:</u> SIGMAGUARD CSF 650 7443 BS 4800 14C39 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |

ANNEXE F
WHOLE SHIP SPECIFICATIONS
Proposed by

PPG PROTECTIVE & MARINE COATINGS

| Proposed Systems/Materials | | | | Number of Coats | NDFT per coat microns | Theo SR m²/litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|---------------------|----------------------------------|------|-----------------|-----------------------|------------------|---------------------|---------------------|-----------------|-------------------|
| <u>Q. BATTERY COMPARTMENTS</u> | | | | | | | | | | |
| (i) | <u>Primer:</u> | SIGMASHIELD 220 | 7922 | 1 | 125 | 6.4 | 3½ hrs | 14 days | [230] | 99-403-5015 |
| (ii) | <u>Alternative:</u> | SIGMAGUARD CSF 650 | 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| (iii) | <u>Finish:</u> | SIGMASHIELD 420 BS 4800 00A01 | 7951 | 1 | 125 | 6.7 | 3½ hrs | 14 days | [212] | |
| <u>R. CABLE LOCKERS & COFFERDAMS</u> | | | | | | | | | | |
| SIGMAGUARD CSF 650 | | | 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| <u>S. SEWAGE & WATER BALLAST TANKS.</u> | | | | | | | | | | |
| SIGMA EDGEGUARD PRIMER | | | 5454 | 1 | 150 | 6.6 | 24 hrs | 20 days | 25 | 99-495-3513 |
| SIGMA EDGEGUARD White | | | 5428 | 1 | 300 | 3.3 | 24 hrs | 20 days | 25 | |
| <u>T. MACHINERY SPACE BILGES</u> | | | | | | | | | | |
| (i) | <u>Standard:</u> | SIGMA NOVAGUARD | 7453 | 1 | 300 | 3.3 | 24 hrs | 2 months | 13 | |
| (ii) | <u>Alternative:</u> | SIGMAGUARD CSF 650 | 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| | | | | | | | | | | |
| <u>U. AVCAT, DIESEL, LUB & HYDRAULIC OIL TANKS SYSTEM</u> <u>DEF STAN 80-97 (HIGH SOLIDS)</u> | | | | | | | | | | |
| SIGMAGUARD CSF 650 | | | 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| | | | | | | | | | | |
| <u>V. POTABLE WATER TANKS</u> | | | | | | | | | | |
| SIGMAGUARD CSF 585 | | | 7785 | 1 | 300 | 3.3 | 24 hrs | 20 days | 5 | |
| | | | | | | | | | | |
| <u>W. AQUEOUS FILM-FORMING FOAM (AFFF) TANKS</u> | | | | | | | | | | |
| SIGMAGUARD CSF 650 | | | 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| | | | | | | | | | | |
| <u>X. DEMINERALISED WATER TANKS. (Max Temperature 90°C)</u> | | | | | | | | | | |
| SIGMAGUARD CSF 650 | | | 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| | | | | | | | | | | |
| <u>Y. REFIT / MAINTENANCE</u> Epoxy Holding Primer | | | | | | | | | | |
| SIGMACOVER 280 | | | 7417 | 1 | 50 | 11.4 | 8 hrs | | 430 | 99-569-7697 |

ANNEXE F
WHOLE SHIP SPECIFICATIONS
Proposed by

PPG PROTECTIVE & MARINE COATINGS

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| <u>Z. PRIMERS FOR NON-FERROUS METALS & FRP</u> | | | | | | | |
| (i) <u>Aluminium:</u> SIGMACOVER 280 7417 | 1 | 50 | 11.4 | 8 hrs | 3 months | 432 | 99-569-7697 |
| (ii) <u>Stainless Steel:</u> SIGMACOVER 280 7417 | 1 | 50 | 11.4 | 8 hrs | 3 months | 432 | 99-569-7697 |
| (iii) <u>Zinc Spray:</u> SIGMACOVER 280 7417 | 1 | 50 | 11.4 | 8 hrs | 3 months | 432 | 99-569-7697 |
| (iv) <u>Galvanise:</u> SIGMACOVER 280 7417 | 1 | 50 | 11.4 | 8 hrs | 3 months | 432 | 99-569-7697 |
| (v) <u>Indicator coat for FRP:</u> | | | | | | | |

Notes:

1. The recoat intervals published above are based on the manufacturer's figures quoted for 20°C
2. The number of coats, stated in the above table, relate to airless spray application to achieve the stated Nominal Dry Film Thickness (NDT). Should brush application be required for touch up and repair then additional coats may be necessary to achieve the required NDFT.
3. # = No maximum recoat interval, see Manufacturer's Technical Data Sheet/Application Instructions for requirements.
4. It is important to ensure that surfaces are clean and free of contamination when overcoating materials, that have been left exposed, this is especially true for those products with an indefinite recoat interval.
5. The Theoretical Spreading Rate (TSR) quoted in the table above is calculated from the coatings physical constants and makes no allowance for loss and assumes a totally smooth surface. The actual spreading rate achieved Practical Spreading Rate (PSR) is dependent upon many factors and in practice the factor used may vary from as little as 1.05 up to as much as 4+. It is usual for paint manufactures to use figures of 1.3 or 1.4 for estimating purposes but they always add the caveat that actual consumption achieved may vary due to such factors as surface profile, wastage due to material left in the can, weather conditions, skill of operator etc.
6. ~ = Use blast primer Y. when appropriate

INTENTIONALLY BLANK



INTENTIONALLY BLANK

ANNEXE G
WHOLE SHIP SPECIFICATIONS
Proposed by

LEIGH'S PAINT'S

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| A. <u>UNDERWATER PRIMER (Re-blast) ~</u> | | | | | | | |
| (i) <u>Standard</u> : EPIGRIP C425V2 | 1 | 175 | 4.3 | 8 hrs | # | 186 | 99 786 7949 |
| (ii) <u>Tie Coat</u> : RESISTEX M535 | 1 | 50 | 8.0 | 2 hrs | # | 502 | 99-453-1479 |
| B. <u>UNDERWATER PRIMER (T/U at Docking)</u> | | | | | | | |
| (i) <u>Standard</u> : EPIGRIP C425V2 | 1 | 175 | 4.3 | 8 hrs | # | 186 | 99 786 7949 |
| (ii) <u>Tie Coat</u> : RESISTEX M535 | 1 | 50 | 8.0 | 2 hrs | # | 502 | 99-453-1479 |
| C. <u>ANTIFOULING (Tin Free - 5yr life)</u> | | | | | | | |
| D. <u>ANTIFOULING (FOUL RELEASE 5+ yr life)</u> | | | | | | | |
| E. <u>ANTIFOULING (Tin Free 3+ yr life)</u> | | | | | | | |
| ENVOY TF 500 Red | 1 | 75 | 8.4 | 6 hrs | # | 390 | |
| ENVOY TF 500 Brown | 1 | 75 | 8.4 | 6 hrs | # | 390 | |
| F. <u>BOOTTOP ANTIFOULING (Tin Free)</u> | | | | | | | |
| ENVOY TF 500 BLACK | 2 | 75 | 8.4 | 6 hrs | # | 390 | 99-423-7738 |
| G. <u>A/W HULL & SUPERSTRUCTURE PRIMER (Re-blast) ~</u> | | | | | | | |
| EPIGRIP C425V2 | 1 | 100 | 7.5 | 4 hrs | # | 186 | 99 786 7949 |
| H. <u>A/W HULL & SUPERSTRUCTURE PRIMER (Touch Up)</u> | | | | | | | |
| EPIGRIP C425V2 | 1 | 100 | 7.5 | 4 hrs | # | 186 | 99 786 7949 |
| J. <u>A/W HULL & SUPERSTRUCTURE FINISH</u> | | | | | | | |
| (i) <u>Standard</u> : LEIGHS A165 Light Weatherwork Grey BS 381C 676 | 1 | 35 | 14.6 | 16 hrs | # | 407 | 99-982-2604 |
| (ii) <u>Alternative</u> : EPIGRIP C750V2 Light Weatherwork Grey BS 381C 676 | 1 | 50 | 10.6 | 3 hrs | # | 364 | 99-212-2175 |
| (iii) <u>Tie Coat (if required)</u> : LEIGHS M671 | 1 | 35 | 14.9 | 4 hrs | # | 380 | 99-872-1746 |
| (iv) <u>Sealer for RASH</u> : ENVIROGARD M260 | 1 | 35 | 12.5 | 2 hrs | # | 49 | 99-660-9717 |

ANNEXE G
WHOLE SHIP SPECIFICATIONS
Proposed by

LEIGH'S PAINT'S

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| <u>K. FLIGHT & WEATHERDECK SYSTEMS – DEF STAN 80-134</u> | | | | | | | |
| <u>(a) Hangar Doors</u> | | | | | | | |
| <u>Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> EPIGRIP C750V2 | 1 | 50 | 10.6 | 3 hrs | # | 364 | 99-212-2175 |
| <u>(b) Flight Deck - Type 2 Non-skid Finish:</u> | | | | | | | |
| <u>Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 4 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> EPIDEK M339 Extra Dark Sea Grey BS 381C 640 | 2 | 200 | 1.8 | 4 hrs | # | 250 | 99-215-4495 |
| <u>Type 2 Repair Kit:</u> EPIDECK F339 | | | | | | | 99-383-4334 |
| <u>(c) Hanger Deck & Weatherdeck - Type 1 Non-skid Finish</u> | | | | | | | |
| <u>Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 4 hrs | # | 186 | 99 786 7949 |
| <u>Hangar Deck:</u> EPIDEK M377 Dark Admiralty Grey BS 381C 632 | 2 | 250 | 2.5 | 4 hrs | # | 330 | 99-777-8689 |
| <u>Weatherdeck:</u> EPIDEK M377 Extra Dark Sea Grey BS 381C 640 | 2 | 250 | 2.5 | 4 hrs | # | 330 | |
| <u>Type 1 Repair Kit:</u> EPIDECK F377 | | | | | | | 99-087-4902 |
| <u>(d). Gloss for Deck Margins:</u> EPIGRIP M262 Extra Dark Sea Grey BS 381C 640 | 1 | 75 | | | # | 354 | 99-133-8713 |
| <u>L. INTERIOR DRY COMPARTMENTS (Complete Represervation)</u> | | | | | | | |
| <u>Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> ENVIROGARD M770 BS 4800 00A01 | 1 | 25 | 15.6 | 3 hrs | # | 78 | 99-517-5228 |
| <u>M. INTERIOR DRY COMPARTMENTS (Touch up)</u> | | | | | | | |
| <u>Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> ENVIROGARD M770 BS 4800 00A01 | 2 | 25 | 15.6 | 3 hrs | # | 78 | 99-517-5228 |

ANNEXE G
WHOLE SHIP SPECIFICATIONS
Proposed by

LEIGH'S PAINT'S

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| <u>N. INTERIOR WET COMPARTMENTS (Complete Represervation)</u> | | | | | | | |
| (i) <u>Standard Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> BIOGARD M630V2 BS 4800 00A01 | 1 | 75 | 6.8 | 24 hrs | # | 0 | 99-535-5105 |
| (ii) <u>Citadel lobby - Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> BIOGARD M630V2 - Colour either: BS 4800 00A01 or Grey BS 381C 676 | 1 | 75 | 6.8 | 24 hrs | # | 66 | 99-535-5105 |
| (iii) <u>Cleansing Stations - Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> EPIGRIP H766 White | 1 | 40 | 14.0 | 5 hrs | # | 395 | 99-623-9946 |
| (iv) <u>Magazine - Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> BIOGARD M630V2 BS 4800 00A01 | 1 | 75 | 6.8 | 24 hrs | # | 0 | 99-535-5105 |
| <u>O. INTERIOR WET COMPARTMENTS (Touch-up)</u> | | | | | | | |
| (i) <u>Standard - Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> BIOGARD M630V2 BS 4800 00A01 | 1 | 75 | 6.8 | 24 hrs | # | 0 | 99-535-5105 |
| (ii) <u>Citadel lobby - Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> BIOGARD M630V2 - Colour either: BS 4800 00A01 or Grey BS 381C 676 | 1 | 75 | 6.8 | 24 hrs | # | 0 | 99-535-5105 |
| (iii) <u>Cleansing Stations - Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> EPIGRIP H766 White | 1 | 40 | 14.0 | 5 hrs | # | <u>395</u> | 99-623-9946 |
| (iv) <u>Magazine - Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> BIOGARD M630V2 BS 4800 00A01 | 1 | 75 | 6.8 | 24 hrs | # | 0 | 99-535-5105 |
| <u>P. INTERIOR DECKS</u> | | | | | | | |
| (i) <u>Standard Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> BIOGARD M630V2 Green BS 4800 14C39 | 1 | 75 | 6.8 | 24 hrs | # | 0 | 99-255-5237 |
| (ii) <u>Cleansing Stations - Primer:</u> EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99 786 7949 |
| <u>Finish:</u> EPIGRIP H766 Green BS 4800 14C39 | 1 | 40 | 14.0 | 5 hrs | # | <u>395</u> | 99-501-4661 |
| <u>Q. BATTERY COMPARTMENTS</u> | | | | | | | |
| <u>Primer:</u> EPIGRIP C425V2 | 1 | 100 | 7.5 | 4hrs | # | 197 | 99 786 7949 |
| <u>Finish:</u> BIOGARD M630V2 BS 4800 00A01 | 1 | 75 | 6.8 | 24 hrs | # | 0 | 99-535-5105 |
| <u>R. CABLE LOCKERS & COFFERDAMS</u> | | | | | | | |
| EPIGRIP L524 WHITE | 2 | 125 | 5.1 | 12 hrs | # | 296 | 99-564-2934 |
| <u>S. SEWAGE & WATER BALLAST TANKS.</u> | | | | | | | |
| <u>Water Ballast Tanks:</u> EPIGRIP L524 | 2 | 125 | 5.1 | 12 hrs | # | 296 | 99-564-2934 |
| <u>Sewage Tanks - Primer:</u> EPIGRIP H735 | 1 | 125 | 5.4 | 6 hrs | 3 days | 270 | 99-341-1160 |
| <u>Finish:</u> EPIGRIP H736 | 1 | 125 | 5.2 | 6 hrs | 3 days | 283 | 99-850-0225 |

ANNEXE G
WHOLE SHIP SPECIFICATIONS
Proposed by

LEIGH'S PAINT'S

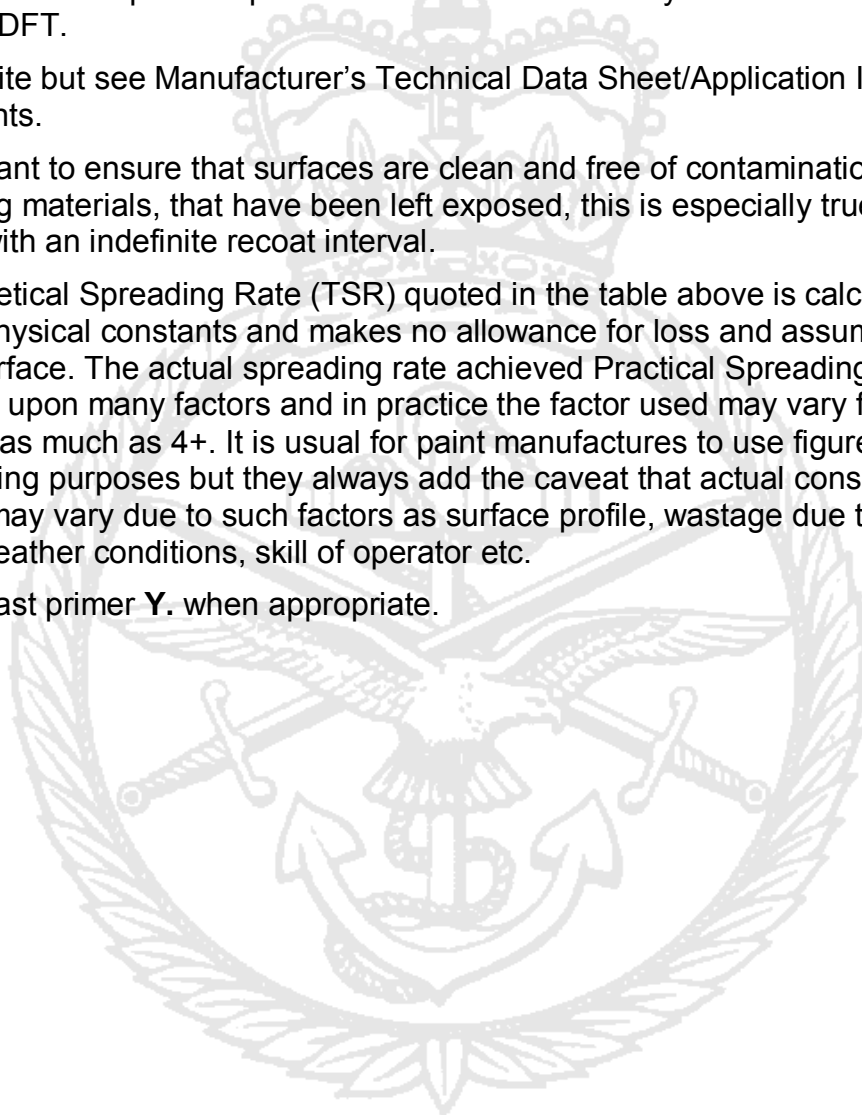
| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|----------------------------|
| <u>T. MACHINERY SPACE BILGES</u> | | | | | | | |
| (i) <u>Standard:</u> EPIGRIP L524 WHITE | 2 | 125 | 5.1 | 12 hrs | # | 296 | 99-564-2934 |
| (ii) <u>Alternative:</u> EPIGRIP L524 WHITE BIOGARD M630V2 BS 4800 00A01 | 2 1 | 125 75 | 5.1 6.8 | 7 days 12 hrs | # # | 296 0 | 99-564-2934 99-535-5105 |
| <u>U. AVCAT, DIESEL, LUB & HYDRAULIC OIL TANKS SYSTEM</u> <u>DEF STAN 80-97 (HIGH SOLIDS)</u> | | | | | | | |
| EPIGRIP H735 | 1 | 125 | 5.4 | 6 hrs | 3 days | 270 | 99-341-1160 |
| EPIGRIP H736 | 1 | 125 | 5.2 | 6 hrs | 3 days | 283 | 99-850-0225 |
| <u>V. POTABLE WATER TANKS</u> | | | | | | | |
| HYDROGARD H20V2 | 1 | 400 | 2.5 | 12 hrs | 36 hrs | 0 | |
| <u>W. AQUEOUS FILM-FORMING FOAM (AFFF) TANKS</u> | | | | | | | |
| EPIGRIP C251 | 2 | 125 | 5.9 | 24 hrs | 28 days | 235 | 99-284-3464 |
| <u>X. DEMINERALISED WATER TANKS (Max Temperature 90°C)</u> | | | | | | | |
| EPIGRIP C251 | 2 | 125 | 5.9 | 24 hrs | 28 days | 235 | 99-284-3464 |
| <u>Y. EPOXY HOLDING PRIMER</u> | | | | | | | |
| METAGARD L574 | 1 | 25 | 11.6 | 3 hrs | # | 594 | 99-895-9894 |
| <u>Alternative & maintenance:</u> EPIGRIP M111 | 1 | 60 | 9.0 | 4 hrs | # | 383 | 99-884-5957 |
| <u>Z. PRIMERS FOR NON-FERROUS METALS</u> | | | | | | | |
| (i) <u>Aluminium:</u> EPIGRIP H795 | 1 | 35 | 10.9 | 4 hrs | # | 575 | 99-225-0195 |
| (ii) <u>Stainless Steel:</u> EPIGRIP H795 | 1 | 35 | 10.9 | 4 hrs | # | 575 | 99-225-0195 |
| (iii) <u>Zinc Spray:</u> METAGARD L574 | 1 | 25 | 11.6 | 3 hrs | # | 594 | 99-895-9894 |
| (iv) <u>Galvanise:</u> EPIGRIP H795 | 1 | 35 | 10.9 | 4 hrs | # | 575 | 99-225-0195 |
| (v) <u>Indicator Coat for FRP:</u> EPIGRIP C425V2 Off white | 1 | 100 | 7.5 | 4 hrs | # | 186 | 99-133-8714 |

ANNEXE G
WHOLE SHIP SPECIFICATIONS
Proposed by

LEIGH'S PAINT'S

Notes:

1. The recoat intervals published above are based on the manufacturer's figures quoted for 23°C
2. The number of coats stated in the above table, relate to airless spray application to achieve the stated Nominal Dry Film Thickness (NDFT). Should brush application be required for touch up and repair then additional coats may be necessary to achieve the required NDFT.
3. # = Indefinite but see Manufacturer's Technical Data Sheet/Application Instructions for requirements.
4. It is important to ensure that surfaces are clean and free of contamination when overcoating materials, that have been left exposed, this is especially true for those products with an indefinite recoat interval.
5. The Theoretical Spreading Rate (TSR) quoted in the table above is calculated from the coatings physical constants and makes no allowance for loss and assumes a totally smooth surface. The actual spreading rate achieved Practical Spreading Rate (PSR) is dependent upon many factors and in practice the factor used may vary from as little as 1.05 up to as much as 4+. It is usual for paint manufactures to use figures of 1.3 or 1.4 for estimating purposes but they always add the caveat that actual consumption achieved may vary due to such factors as surface profile, wastage due to material left in the can, weather conditions, skill of operator etc.
6. ~ = Use blast primer Y. when appropriate.



INTENTIONALLY BLANK



INTENTIONALLY BLANK

ANNEXE H

WHOLE SHIP STOCK NUMBERS (NSNs)

1. WHOLE SHIP MATERIALS

| Material | Supplier | Pack size | NSN |
|---|-------------------------|-----------|------------------|
| REMOVALL 510 | Cirrus Systems Ltd | 5 US gal | 0810-99-871-5945 |
| ALP 500 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-967-8636 |
| AQUALIFE GLOSS FINISH Ash Grey BS4800 00A01 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-757-9334 |
| AQUALIFE GLOSS FINISH BS381C 676 Light Weatherwork Grey | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-375-9367 |
| AQUALIFE GLOSS FINISH Green BS4800 14C39 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-755-6242 |
| AQUALIFE GLOSS FINISH White | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-371-8400 |
| AQUALIFE WSE PRIMER Grey | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-398-1182 |
| CAMACRYL FINISH MAC Ash Grey BS4800 00A01 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-676-4126 |
| CAMACRYL FINISH MAC Azure Blue BS381C 104 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-366-5444 |
| CAMACRYL FINISH MAC Canary BS381C 309 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-446-0554 |
| CAMACRYL FINISH MAC Dark Blue BS4800 18C39 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-862-0034 |
| CAMACRYL FINISH MAC Mid Brunswick Green BS381C 226 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-794-2129 |
| CAMACRYL FINISH MAC Wedgwood Blue BS4800 18D43 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-665-3660 |
| CAMACRYL FINISH MAC White | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-380-7010 |
| CAMSIL WB Black | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-397-4388 |
| CAMSIL WB GREY 541W 0224 Lt Weatherwork Grey BS381C 676 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-327-9058 |
| CAMSIL WB Lt Brunswick Green BS381C 225 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-250-1029 |
| CAMSIL WB Signal Red BS381C 537 | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-225-7163 |
| GALVANITE 200 White | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-995-4247 |
| GALVANITE 200 White | Chugoku Paints (UK) Ltd | 20 litres | 8010-99-290-5829 |
| NZ PRIMER S Red Oxide | Chugoku Paints (UK) Ltd | 20 litres | 8010-99-595-6056 |
| UMEGUARD HS Grey | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-126-9478 |
| UMEGUARD HS SILVER | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-763-0243 |
| UMEGUARD HS SILVER | Chugoku Paints (UK) Ltd | 20 litres | 8010-99-264-0145 |
| UMEGUARD HS White | Chugoku Paints (UK) Ltd | 5 litres | 8010-99-564-2409 |
| BLAKES GELPROTECT SFE200 Cream | Hempel Paints Limited | 2½litres | 8010-99-517-4318 |
| HEMPADUR 1555 0 Off White 1163 | Hempel Paints Limited | 5 litres | 8010-99-870-0653 |
| HEMPADUR 1555 0 Off White 1163 | Hempel Paints Limited | 20 litres | 8010-99-700-4191 |
| HEMPADUR 1557 Light Grey 12430 | Hempel Paints Limited | 5 litres | 8010-99-943-1152 |

ANNEXE H

WHOLE SHIP STOCK NUMBERS (NSNs)

| Material | Supplier | Pack size | NSN |
|---|-----------------------|-----------|------------------|
| HEMPADUR 1557 Light Grey 12430 | Hempel Paints Limited | 20 litres | 8010-99-170-5097 |
| HEMPADUR 45143 White10000 | Hempel Paints Limited | 5 litres | 8010-99-602-7280 |
| HEMPADUR 45150 Red 50630 | Hempel Paints Limited | 5 litres | 8010-99-535-5832 |
| HEMPADUR 45880 White | Hempel Paints Limited | 5 litres | 8010-99-264-0387 |
| HEMPADUR 45880 MIO 12430 | Hempel Paints Limited | 5 litres | 8010-99-803-7233 |
| HEMPADUR 45880 MIO 12430 | Hempel Paints Limited | 20 litres | 8010-99-479-5449 |
| HEMPADUR LTC 45143 GREEN BS4800 14C39 | Hempel Paints Limited | 5 litres | 8010-99-471-1920 |
| HEMPEL'S NON SKID (NO AGGREGATE) 457GA BS381C 640 (Extra dark sea grey) | Hempel Paints Limited | 5 litres | 8010-99-879-5150 |
| HEMPEL'S NON SKID (NO AGGREGATE) 457GA BS381C 640 (Extra dark sea grey) | Hempel Paints Limited | 20 litres | 8010-99-488-6439 |
| HEMPEL'S NON SKID 45340 BS381C 640 (Extra dark sea grey) Type 2 | Hempel Paints Limited | 20 litres | 8010-99-213-1121 |
| HEMPELS NON SKID 457GB BLACK | Hempel Paints Limited | 20 Kg | 8010-99-507-2851 |
| HEMPELS DECK MARKING 453GB Black | Hempel Paints Limited | 20 litres | 8010-99-480-7979 |
| HEMPELS ANTIFOULING OLYMPIC 8695 Black | Hempel Paints Limited | 20 litres | 8010-99-147-9828 |
| HEMPELS UNDERCOAT 424GB Grey | Hempel Paints Limited | 2½ litres | 8010-99-244-6752 |
| HEMPELS SILICONE ALKYD FINISH 536GB Light Weatherwork Grey BS381C 676 | Hempel Paints Limited | 2½ litres | 8010-99-772-5448 |
| HEMPELS DECK MARKING 453GB White | Hempel Paints Limited | 5 litres | 8010-99-323-1118 |
| HEMPELS DECK MARKING 453GB Green BS381C 225 | Hempel Paints Limited | 5 litres | 8010-99-986-6762 |
| HEMPELS DECK MARKING 453GB Red BS381C 537 | Hempel Paints Limited | 5 litres | 8010-99-724-9085 |
| HEMPELS DECK MARKING 453GB Black | Hempel Paints Limited | 5 litres | 8010-99-351-4222 |
| HEMPELS DECK REPAIR KIT 941GB Type 2 | Hempel Paints Limited | Pack | 8010-99-340-2100 |
| HEMPELS DECK REPAIR KIT 942GB Type 1 | Hempel Paints Limited | Pack | 8010-99-471-2960 |
| HEMPELS NON SKID 45340 Grey BS3813 632 Type 1 | Hempel Paints Limited | 20 litres | 8010-99-670-9581 |
| HEMPELS WATER BASED EPOXY 48580 Black | Hempel Paints Limited | 5 Litres | 8010-99-864-5046 |
| HEMPELS WATER BASED EPOXY 48580 BS4800 00A01 (Ash Grey) | Hempel Paints Limited | 5 litres | 8010-99-988-2715 |
| HEMPELS WATER BASED EPOXY 48580 BS4800 14C39 (Green) | Hempel Paints Limited | 5 litres | 8010-99-279-8221 |
| HEMPELS WATER BASED EPOXY 48580 BS381C 676 (Light Weatherwork Grey) | Hempel Paints Limited | 5 litres | 8010-99-976-9118 |
| HEMUCRYL ENAMEL 5810 Azure Blue BS381C 104 | Hempel Paints Limited | 5 litres | 8010-99-382-4025 |
| HEMUCRYL ENAMEL 5810 Black | Hempel Paints Limited | 5 litres | 8010-99-175-1334 |
| HEMUCRYL ENAMEL 5810 Canary BS381C 309 | Hempel Paints Limited | 5 litres | 8010-99-858-1263 |
| HEMUCRYL ENAMEL 5810 Dark Blue BS4800 18C39 | Hempel Paints Limited | 5 litres | 8010-99-290-5925 |
| HEMUCRYL ENAMEL 5810 Lt Brunswick Green BS381C 225 | Hempel Paints Limited | 5 litres | 8010-99-831-8959 |

ANNEXE H

WHOLE SHIP STOCK NUMBERS (NSNs)

| Material | Supplier | Pack size | NSN |
|---|----------------------------|-----------|------------------|
| HEMUCRYL ENAMEL 5810 Mid Brunswick Green BS381C 226 | Hempel Paints Limited | 5 litres | 8010-99-162-2531 |
| HEMUCRYL ENAMEL 5810 Signal Red BS381C 537 | Hempel Paints Limited | 5 litres | 8010-99-250-8046 |
| HEMUCRYL ENAMEL 5810 Wedgwood Blue BS4800 18D43 | Hempel Paints Limited | 5 litres | 8010-99-317-6235 |
| HEMUCRYL ENAMEL 5810 Ash Grey BS4800 00A01 | Hempel Paints Limited | 5 litres | 8010-99-660-9288 |
| HEMUCRYL ENAMEL 5810 Golden Brown BS381C 414 | Hempel Paints Limited | 5 litres | 8010-99-562-6381 |
| HEMUCRYL ENAMEL 5810 White | Hempel Paints Limited | 5 litres | 8010-99-299-0228 |
| HEMUCRYL TI-COAT 1820 0 Red 50710 | Hempel Paints Limited | 5 litres | 8010-99-199-2908 |
| HEMUDUR 1850 Grey 12170 | Hempel Paints Limited | 20 litres | 8010-99-867-8090 |
| INTERCRYL 506 GREY WPA300 | International Coatings Ltd | 5 litres | 8010-99-147-1269 |
| INTERCRYL 507 Grey BS 4800 00A01 | International Coatings Ltd | 5 litres | 8010-99-365-4243 |
| INTERCRYL 700 Grey BS 4800 00A01 | International Coatings Ltd | 5 litres | 8010-99-7998832 |
| INTERCRYL 700 Azure Blue BS381C 104 | International Coatings Ltd | 5 litres | 8010-99-551-3792 |
| INTERCRYL 700 Golden Brown BS381C 414 | International Coatings Ltd | 5 litres | 8010-99-314-8294 |
| INTERCRYL 700 Mariner Blue BS4800 18C39 | International Coatings Ltd | 5 litres | 8010-99-551-3791 |
| INTERCRYL 700 Mid Brunswick Green BS381C 226 | International Coatings Ltd | 5 litres | 8010-99-812-5614 |
| INTERCRYL 700 Wedgwood Blue BS4800 18D43 | International Coatings Ltd | 5 litres | 8010-99-248-4598 |
| INTERCRYL 700 White QYZ028 | International Coatings Ltd | 5 litres | 8010-99-979-7888 |
| INTERCRYL 700 Yellow RAL 1018 | International Coatings Ltd | 5 litres | 8010-99-774-1224 |
| INTERFINE 629 HS Black | International Coatings Ltd | 5 litres | 8010-99-375-3200 |
| INTERFINE 629 HS Signal Red BS 381C 537 | International Coatings Ltd | 5 litres | 8010-99-535-9034 |
| INTERFINE 629 HS Lt Brunswick Green BS 381C 225 | International Coatings Ltd | 5 litres | 8010-99-957-7410 |
| INTERFINE 629 Light Weatherwork Grey BS381C 676 | International Coatings Ltd | 5 litres | 8010-99-664-5391 |
| INTERFINE 979 GREEN | International Coatings Ltd | 5 litres | 8010-99-729-7357 |
| INTERFINE 979 WHITE | International Coatings Ltd | 5 litres | 8010-99-168-7337 |
| INTERGARD 263 Tie Coat Light Grey | International Coatings Ltd | 20 litres | 8010-99-133-3854 |
| INTERGARD 269 PROTECTIVE PRIMER | International Coatings Ltd | 20 litres | 8010-99-983-0743 |
| INTERGARD1735 WB Dark Sea Grey BS381C 640 | International Coatings Ltd | 5 litres | 8010-99-702-0607 |
| INTERGARD 1735 WB Green BS4800 14C39 | International Coatings Ltd | 5 litres | 8010-99-483-1994 |
| INTERGARD 1735 WB Ash Grey BS4800 00A01 | International Coatings Ltd | 5 litres | 8010-99-255-0527 |
| INTERGARD 740 Dark Sea Grey BS381C 640 | International Coatings Ltd | 5 litres | 8010-99-182-2627 |
| INTERGARD 740 Black | International Coatings Ltd | 5 litres | 8010-99-488-7443 |

ANNEXE H

WHOLE SHIP STOCK NUMBERS (NSNs)

| Material | Supplier | Pack size | NSN |
|---|-------------------------------|-----------|------------------|
| INTERGARD 740 Red | International Coatings Ltd | 5 litres | 8010-99-377-5457 |
| INTERGARD 740 White | International Coatings Ltd | 5 litres | 8010-99-773-8674 |
| INTERGARD 740 Black | International Coatings Ltd | 20 litres | 8010-99-285-3824 |
| INTERGARD 840 Series Buff | International Coatings Ltd | 20 litres | 8010-99-909-6023 |
| INTERGARD 840 White | International Coatings Ltd | 5 litres | 8010-99-279-8277 |
| INTERGARD 5000 Ash Grey BS 4800 00A01 | International Coatings Ltd | 5 litres | 8010-99-000-5256 |
| INTERLAC 846 Light Weatherwork Grey BS381C 676 | International Coatings Ltd | 2½ litres | 8010-99-700-8410 |
| INTERSHEEN AQUACOAT Ash Grey BS4800 00A01 | International Coatings Ltd | 5 litres | 8010-99-365-4243 |
| INTERSHIELD 851 Black | International Coatings Ltd | 10 litres | 8010-99-371-6753 |
| INTERSHIELD 851 Extra Dark Sea Grey BS381C 640 | International Coatings Ltd | 20 litres | 8010-99-391-0953 |
| INTERSHIELD 852 Black | International Coatings Ltd | 5 litres | 8010-99-250-1864 |
| INTERSHIELD 852 White | International Coatings Ltd | 5 litres | 8010-99-274-4430 |
| INTERSHIELD 852 Red | International Coatings Ltd | 5 litres | 8010-99-666-9269 |
| INTERSHIELD 852 Green | International Coatings Ltd | 5 litres | 8010-99-871-6360 |
| INTERSHIELD 852 Dark Admiralty Grey BS 381C 632 | International Coatings Ltd | 5 litres | 8010-99-149-8996 |
| INTERSHIELD 852 Extra Dark Sea Grey BS 381C 640 | International Coatings Ltd | 5 litres | 8010-99-149-8996 |
| INTERSLEEK RAPID Black | International Coatings Ltd | 1 litre | 8010-99-344-3990 |
| INTERSPEED 340 Black | International Coatings Ltd | 20 litres | 8010-99-874-3193 |
| INTERSPEED 642 Black | International Coatings Ltd | 20 litres | 8010-99-792-1990 |
| ANTI-FOULING SEAGUARDIAN MD | Jotun Paints (Europe) Limited | 20 litres | 8010-99-968-3624 |
| EPOXY HOLDING PRIMER Red | Jotun Paints (Europe) Limited | 20 litres | 8010-99-817-2976 |
| JOTA-ARMOUR AS Extra Dark Sea Grey BS381C 640 | Jotun Paints (Europe) Limited | 20 litres | 8010-99-226-7300 |
| JOTAMASTIC 87 Extra Dark Sea Grey BS381C 640 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-549-5820 |
| JOTAPROOF TOPCOAT Light Weatherwork Grey BS381C 676 | Jotun Paints (Europe) Limited | 20 litres | 8010-99-310-9229 |
| JOTAPROOF TOPCOAT Light Weatherwork Grey BS381C 676 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-583-1344 |
| POLYMASTIC 100 Grey | Jotun Paints (Europe) Limited | 5 litres | 8010-99-362-1638 |
| POLYMASTIC 2000 Red | Jotun Paints (Europe) Limited | 5 litres | 8010-99-395-8448 |
| POLYMASTIC 2000 Ash Grey BS4800 00A01 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-665-9772 |
| POLYMASTIC 2000 Lt Weatherwork Grey BS381C 676 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-567-4198 |
| POLYMASTIC 2000 Green BS4800 14C39 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-514-9385 |
| PRIMASTIC UNIVERSAL MD | Jotun Paints (Europe) Limited | 5 litres | 8010-99-509-7172 |

ANNEXE H

WHOLE SHIP STOCK NUMBERS (NSNs)

| Material | Supplier | Pack size | NSN |
|---|-------------------------------|-----------|------------------|
| VINYGUARD SILVERGREY | Jotun Paints (Europe) Limited | 5 litres | 8010-99-212-5888 |
| WATERFINE PRIMER Lt Grey | Jotun Paints (Europe) Limited | 5 litres | 8010-99-462-9708 |
| WATERFINE TOPCOAT Azure Blue BS381C 104 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-186-9127 |
| WATERFINE TOPCOAT Black | Jotun Paints (Europe) Limited | 5 litres | 8010-99-877-1641 |
| WATERFINE TOPCOAT Dark Blue BS4800 18C39 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-347-9130 |
| WATERFINE TOPCOAT Lt Brunswick Green BS381C 225 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-131-6457 |
| WATERFINE TOPCOAT Lt Weatherwork Grey BS381C 676 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-989-6214 |
| WATERFINE TOPCOAT Mid Brunswick Green BS381C 226 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-873-4271 |
| WATERFINE TOPCOAT Signal Red BS381C 537 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-921-4654 |
| WATERFINE TOPCOAT Wedgwood Blue BS4800 18D43 | Jotun Paints (Europe) Limited | 5 litres | 8010-99-212-5714 |
| WATERFINE TOPCOAT White | Jotun Paints (Europe) Limited | 5 litres | 8010-99-372-9140 |
| WATERFINE TOPCOAT Golden Brown | Jotun Paints (Europe) Limited | 5 litres | 8010-99-997-4563 |
| BIOGARD M630V2 Light Weatherwork Grey BS381C 676 | Leighs Paints | 5 litres | 8010-99-131-6908 |
| BIOGARD M630V2 Green BS4800 14C39 | Leighs Paints | 5 litres | 8010-99-255-5237 |
| BIOGARD M630V2 Ash Grey BS4800 00A01 | Leighs Paints | 5 litres | 8010-99-535-5105 |
| BIOGARD M630V2 Black | Leighs Paints | 5 litres | 8010-99-739-8402 |
| BIOGARD M630V2 White | Leighs Paints | 5 litres | 8010-99-313-4440 |
| ENVIROGARD M770 Ash Grey BS4800 00A01 | Leighs Paints | 5 litres | 8010-99-517-5228 |
| ENVIROGARD M770 Black | Leighs Paints | 5 litres | 8010-99-768-1426 |
| ENVIROGARD M770 Azure Blue BS381C 104 | Leighs Paints | 5 litres | 8010-99-878-8150 |
| ENVIROGARD M770 Canary BS381C 309 | Leighs Paints | 5 litres | 8010-99-726-4136 |
| ENVIROGARD M770 Dark Blue BS4800 18C39 | Leighs Paints | 5 litres | 8010-99-723-3650 |
| ENVIROGARD M770 Lt Brunswick Green BS381C 225 | Leighs Paints | 5 litres | 8010-99-313-9445 |
| ENVIROGARD M770 Mid Brunswick Green BS381C 226 | Leighs Paints | 5 litres | 8010-99-862-5170 |
| ENVIROGARD M770 Signal Red BS381C 537 | Leighs Paints | 5 litres | 8010-99-225-7155 |
| ENVIROGARD M770 Light Weatherwork Grey BS381C 676 | Leighs Paints | 5 litres | 8010-99-833-4765 |
| ENVIROGARD M770 Wedgwood Blue BS4800 18D43 | Leighs Paints | 5 litres | 8010-99-723-3651 |
| ENVIROGARD M770 White | Leighs Paints | 5 litres | 8010-99-231-3852 |
| ENVOY TF500 Black | Leighs Paints | 15 litres | 8010-99-423-7738 |
| EPIDEK M339NA | Leighs Paints | 5 litres | 8010-99-845-5203 |
| EPIGRIP C425V2 Light Grey | Leighs Paints | 5 litres | 8010-99-786-7949 |
| EPIGRIP C425 Light Grey | Leighs Paints | 20 litres | 8010-99-126-6377 |
| EPIGRIP C425V2 Off White | Leighs Paints | 20 litres | 8010-99-133-8714 |

ANNEXE H

WHOLE SHIP STOCK NUMBERS (NSNs)

| Material | Supplier | Pack size | NSN |
|--|---------------------------|--------------|------------------|
| EPIGRIP H766 Green BS4800 14C39 | Leighs Paints | 5 litres | 8010-99-501-4661 |
| EPIGRIP H766 White | Leighs Paints | 5 litres | 8010-99-623-9946 |
| EPIGRIP L524 Aluminium | Leighs Paints | 5 litres | 8010-99-216-0021 |
| EPIGRIP L524 White | Leighs Paints | 5 litres | 8010-99-564-2934 |
| EPIGRIP M111 Red | Leighs Paints | 5 litres | 8010-99-884-5957 |
| EPIGRIP M216 Black | Leighs Paints | 5 litres | 8010-99-799-8831 |
| EPIGRIP M902 Aluminium | Leighs Paints | 2.5 litres | 8010-99-421-0972 |
| EPIGRIP C251 White | Leighs Paints | 5 litres | 8010-99-284-3464 |
| LEIGHS A165 Silicone Alkyd Light Weatherwork Grey BS381C 676 | Leighs Paints | 5 litres | 8010-99-982-2604 |
| LEIGHS M255 BLACK | Leighs Paints | 20 litres | 8010-99-417-8341 |
| LEIGHS M255 VANDYKE BROWN BS4800 08B29 | Leighs Paints | 5 litres | 8010-99-905-0772 |
| LEIGHS C750 Light Weatherwork Grey BS381C 676 | Leighs Paints | 5 litres | 8010-99-212-2175 |
| LEIGHS M671 Medium Grey | Leighs Paints | 5 litres | 8010-99-872-1746 |
| LEIGHS M671 Medium Grey | Leighs Paints | 20 litres | 8010-99-862-7354 |
| AMERCOAT 300A Black | Maker Coating Systems Ltd | 5 litres | 8010-17-115-8450 |
| AMERCOAT 300A White | Maker Coating Systems Ltd | 5 litres | 8010-17-108-8249 |
| AMERCOAT 300A BS4800 00A01 | Maker Coating Systems Ltd | 5 litres | 8010-99-535-8577 |
| AMERCOAT 5105 Light Grey | Maker Coating Systems Ltd | 5 litres | 8010-17-117-4697 |
| AMERCOAT 300A BS4800 14C39 Green | Maker Coating Systems Ltd | 5 litres | 8010-17-113-5690 |
| AMERON ABC #3 Black | Maker Coating Systems Ltd | 20 litres | 8010-17-113-7497 |
| AMERON PSX 700 Green BS4800 14C39 | Maker Coating Systems Ltd | 5 litres | 8010-17-113-6169 |
| AMERON PSX 700 White | Maker Coating Systems Ltd | 5 litres | 8010-99-858-1159 |
| AMERLOCK 400C White | Maker Coating Systems Ltd | 5 litres | 8010-17-108-8248 |
| AMERLOCK 400C Ash Grey BS4800 00A01 | Maker Coating Systems Ltd | 5 litres | 8010-99-958-6062 |
| AMERLOCK 400C SAXE BLUE | Maker Coating Systems Ltd | 5 litres | 8010-17-117-6678 |
| AMERLOCK 400C OXFORD BLUE | Maker Coating Systems Ltd | 5 litres | 8010-17-117-6677 |
| AMERCOAT 65 THINNER | Maker Coating Systems Ltd | 5 litres | 8010-17-117-6680 |
| AMERCOAT 911 THINNER | Maker Coating Systems Ltd | 5 litres | 8010-17-117-6681 |
| NU-KLAD 114A FILLER | Maker Coating Systems Ltd | 7.24 kg unit | 8010-17-117-6679 |
| SPC-203 (Sea To Sky) Paint Remover | Maker Coating Systems Ltd | 5 litres | 8010-20-003-3432 |

ANNEXE H

WHOLE SHIP STOCK NUMBERS (NSNs)

| Material | Supplier | Pack size | NSN |
|--|---------------------------|-----------|------------------|
| SIGMA EDGEGUARD 5428 White | Maker Coating Systems Ltd | 5 litres | 8010-99-495-3513 |
| SIGMASHIELD 420 7951 Ash Grey BS4800 00A01 | Maker Coating Systems Ltd | 5 litres | 8010-99-549-3974 |
| SIGMASHIELD 420 7951 Light Weatherwork Grey BS381C 676 | Maker Coating Systems Ltd | 5 litres | 8010-99-723-3658 |
| SIGMAHIELD 220 7922 Light Green | Maker Coating Systems Ltd | 5 litres | 8010-99-403-5015 |
| SIGMASHIELD 280 7417 Yellow | Maker Coating Systems Ltd | 5 litres | 8030-99-354-0443 |
| SIGMACOVER 280 LT 7417 Yellow | Maker Coating Systems Ltd | 20 litres | 8010-99-569-7697 |
| AQUACOVER 45 7250 Azure Blue BS381C 104 | Maker Coating Systems Ltd | 5 litres | 8010-99-863-5457 |
| AQUACOVER 45 7250 Ash Grey B4800 00A01 | Maker Coating Systems Ltd | 5 litres | 8010-99-277-8693 |
| AQUACOVER 45 7250 Black | Maker Coating Systems Ltd | 5 litres | 8010-99-500-7412 |
| AQUACOVER 45 7250 Canary BS381C 309 | Maker Coating Systems Ltd | 5 litres | 8010-99-182-2670 |
| AQUACOVER 45 7250 Dark Blue BS4800 18C39 | Maker Coating Systems Ltd | 5 litres | 8010-99-957-7697 |
| AQUACOVER 45 7250 Lt Brunswick Green BS381C 225 | Maker Coating Systems Ltd | 5 litres | 8010-99-338-4734 |
| AQUACOVER 45 7250 Lt Weatherwork Grey B381C 676 | Maker Coating Systems Ltd | 5 litres | 8010-99-236-5744 |
| AQUACOVER 45 7250 Mid Brunswick Green BS381C 226 | Maker Coating Systems Ltd | 5 litres | 8010-99-269-1301 |
| AQUACOVER 45 7250 Signal Red BS381C 537 | Maker Coating Systems Ltd | 5 litres | 8010-99-880-0100 |
| AQUACOVER 45 7250 Wedgwood Blue BS4800 18D43 | Maker Coating Systems Ltd | 5 litres | 8010-99-471-2071 |
| AQUACOVER 45 7250 White | Maker Coating Systems Ltd | 5 litres | 8010-99-225-7360 |
| AQUACOVER 25 7150 Buff | Maker Coating Systems Ltd | 5 litres | 8010-99-321-6318 |
| SIGMA ALPHAGEN 20 Series Black 7384 | Maker Coating Systems Ltd | 20 litres | 8010-99-280-8371 |

INTENTIONALLY BLANK



INTENTIONALLY BLANK

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S1. AREAS BELOW THE WATERLINE | | | | | | | |
| a) <u>General and Untiled areas</u> | | | | | | | |
| <u>Chugoku Paints (UK) Ltd</u> | | | | | | | |
| UMEGUARD SX Black | 1 | 150 | 4.33 | 20 hrs | 30 days | 470 | |
| Antifouling Tie coat Hiper AC | 1 | 50 | 10.2 | 6 hrs | None | 493 | |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR 4588 MIO Black | 2 | 175 | 4.6 | 8 hrs | 30 days | 198 | 99-149-2439 |
| Antifouling Tie coat HEMPADUR 45182 Black | 1 | 75 | 6.1 | 6 hrs | 3 days | 490 | 99-893-9646 |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERGARD 5000 | 1 | 175 | 4.68 | 12 hrs | 2 months | 179 | 99-000-5256 |
| Antifouling Tie coat INTERGARD 263 | 1 | 75 | 7.6 | 8 hrs | 5 days | 379 | 99-133-3854 |
| <u>Jotun Paints (Europe) Limited</u> | | | | | | | |
| PRIMASTIC UNIVERSAL R/T (STD) | 1 | 200 | 3.75 | 10 hrs | # | 194 | 99-509-7172 |
| Antifouling Tie coat SAFEGUARD UNIVERSAL ES | 1 | 150 | 4.13 | 10 hrs | # | 245 | |
| <u>Maker Coating Systems Ltd/PPG</u> | | | | | | | |
| CORROLESS EPF | 2 | 200 | 4.8 | 16 hrs | 3 days | 80 | 25-150-0972 |
| Antifouling Tie coat SIGMACOVER 525 7902 3333 | 1 | 150 | 5.6 | 3½ hrs | 14 days | 239 | |
| <u>PPG Protective & Marine Coatings</u> | | | | | | | |
| SIGMASHIELD 220 7922 | 1 | 125 | 6.4 | 3½ hrs | 14 days | 262 | 99-403-5015 |
| SIGMASHIELD 420 7951 | 1 | 150 | 5.6 | 3½ hrs | 14 days | 239 | 99-723-3658 |
| Antifouling Tie coat SIGMACOVER 525 7902 Black | 1 | 100 | 7.0 | 8 hrs | 14 days | 272 | |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP M922M Mastic Aluminium | 2 | 200 | 4.2 | 4hrs | # | 146 | 99-495-3873 |
| RESISTEX M535 Black | 1 | 75 | 5.3 | 2 | # | 502 | 99-453-1479 |
| S2. ANTIFOULING | | | | | | | |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| OLYMPIC 8695 Black | 2 | 100 | 5.2 | 10 hrs | # | 390 | 99-147-9828 |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERSPEED 340 Black | 3 | 60 | 10 | 6 hrs | 3 months | 358 | 99-847-3193 |
| <u>Leighs Paint</u> | | | | | | | |
| ENVOY TF500 Black | 3 | 75 | 8.4 | 6 hrs | # | 316 | 99-423-7738 |
| <u>PPG Protective & Marine Coatings</u> | | | | | | | |
| SIGMA ECOFLEET 530 7385 Black | 3 | 100 | 6.6 | 6 hrs | # | 331 | |


ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S3. HULL & SUPERSTRUCTURE | | | | | | | |
| (a) <u>Untiled areas</u> | | | | | | | |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR 4588 MIO 1234 | 2 | 175 | 4.6 | 8 hrs | 30 days | 198 | 99-149-2439 |
| HEMPADUR 45182 BLACK | 1 | 75 | 6.1 | 6 hrs | 3 days | 490 | 99-893-9646 |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERGARD 5000 | 1 | 175 | 4.68 | 12 hrs | 2 months | 179 | |
| INTERGARD 740M Black | 1 | 50 | 10.02 | 16 hrs | # | 420 | 99-488-7443 |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP M922M Mastic Aluminium | 2 | 200 | 4.2 | 4hrs | # | 146 | 99-495-3873 |
| RESISTEX M535 BLACK | 1 | 75 | 5.3 | 2 | # | 502 | 99-453-1479 |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| CORROLESS EPF | 2 | 200 | 4.8 | 16 hrs | 3 days | 80 | 25-150-0972 |
| S4. PERISCOPES & Masts | | | | | | | |
| Visible portions outside the submarine | | | | | | | |
| EPIGRIP H795 | 1 | 35 | 10.9 | 4 hrs | # | 572 | 99-225-0195 |
| IRR Matt BS285 | 3 | | | | | | |
| S5. SUPERSTRUCTURE CASING | | | | | | | |
| (a) <u>General steelwork</u> | | | | | | | |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR 4588 MIO 1234 | 1 | 175 | 4.6 | 8 hrs | 30 days | 198 | 99-149-2439 |
| HEMPEL'S LOW SHEEN BLACK FINISH 510GB Def Stan 80-111 | 2 | | | | | | |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERGARD 5000 | 1 | 250 | 3.28 | 12 hrs | 2 months | 179 | 99-000-5256 |
| INTERGARD 740M Black | 1 | 50 | 10.02 | 16 hrs | # | 420 | 99-488-7443 |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP M922M Mastic Aluminium | 2 | 200 | 4.2 | 4hrs | # | 146 | 99-495-3873 |
| RESISTEX M535 BLACK | 2 | 75 | 5.3 | 2 | # | 502 | 99-453-1479 |
| <u>Maker Coating Systems Ltd/PPG</u> | | | | | | | |
| AMERLOCK 400C BLACK | 2 | 125 | 7 | 16 hrs | # | 106 | 17-106-6001 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S6. WALKWAYS ON STEEL CASING | | | | | | | |
| <u>Chugoku Paints (UK) Ltd</u> | | | | | | | |
| UMEGUARD HS SILVER | 1 | 125 | 7.4 | 20 hrs | 30 days | 158 | 99-763-0243 |
| CAMIDECK FINISH TYPE 1 Black | 2 | 190 | 2.84 | 16 hrs | # | 374 | 99-543-0790 |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR 4588 MIO 1243 | 1 | 100 | 8.2 | 7hrs | 6 hrs* | 168 | 99-149-2439 |
| HEMPEL'S NON SKID 4534GB Type 1 Black | 2 | 200 | 3.2 | 6 hrs | 30 days | 347 | 99-480-7979 |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERGARD 5000 | 1 | 150 | 5.47 | 12 hrs | 4 days | 179 | 99-000-5256 |
| INTERSHIELD 852 Type 1 Black | 2 | 200 | 1.92 | 12 hrs | # | 134 | 99-250-1864 |
| <u>Maker Coating Systems Ltd/PPG</u> | | | | | | | |
| AMERLOCK 400C | 1 | 125 | 7 | 16 hrs | # | 106 | 99-974-7400 |
| AMERLOCK 400 NS Type 1 Black | 2 | 300 | 4 | 16 hrs | # | 106 | 99-184-8542 |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP C425V2 | 1 | 125 | 76.0 | 5 hrs | # | 186 | 99-786-7949 |
| EPIDEK M377 Type 1 Black | 2 | 250 | 2.5 | 4 hrs | # | 330 | 99-777-8692 |
| <u>PPG Protective & Marine Coatings</u> | | | | | | | |
| SIGMASHIELD 220 7922 | 1 | 125 | 6.4 | 3½ hrs | 14 days | 262 | 99-403-5015 |
| SIGMACOVER 456HS 7712 Type 1 Black | 2 | 125 | 5.8 | 8 hrs | # | 156 | |
| S7. INTERNAL DRY SPACES | | | | | | | |
| <u>Chugoku Paints (UK) Ltd</u> | | | | | | | |
| UMEGUARD HS SILVER | 1 | 125 | 7.4 | 20 hrs | 30 days | 158 | 99-763-0243 |
| CAMACRYL FINISH White | 2 | 40 | 11 | 24 hrs | # | 33 | 99-380-7010 |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMUDUR PRIMER 1850 | 1 | 60 | 8.8 | 6 hrs | 1 week | 25 | 99-876-8090 |
| HEMUCRYL ENAMEL 5810 White | 2 | 30 | 13.7 | 6 hrs | 2 hrs | 150 | 99-229-0228 |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERGARD 5000 BS 4800 00A01 | 1 | 125 | 6.56 | 12 hrs | # | 179 | 99-000-5256 |
| INTERCRYL 700 White | 2 | 35 | 11.42 | 60 mins | # | 135 | 99-979-7888 |
| <u>Jotun Paints (Europe) Limited</u> | | | | | | | |
| WATERFINE PRIMER | 2 | 100 | 4.6 | 1.5 hrs | # | 100 | 99-462-9708 |
| WATERFINE TOPCOAT White | 2 | 50 | 7.2 | 1.5 hrs | # | 195 | 99-372-9140 |
| <u>Maker Coating Systems Ltd/PPG</u> | | | | | | | |
| AMERLOCK 400C | 1 | 125 | 7 | 16 hrs | # | 106 | 99-974-7400 |
| AMERCOAT 300A White | 2 | 50 | 10.4 | 16 hrs | # | 0 | 17-108-8249 |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| SIGMACRYLIC AQUACOVER 25 7150 | 2 | 75 | 6.6 | 4 hrs | # | 31 | 99-321-6318 |
| SIGMACRYLIC AQUACOVER 45 7520 White | 2 | 50 | 6.8 | 6 hrs | # | 17 | 99-225-7360 |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP C425V2 | 1 | 125 | 6.0 | 5 hrs | # | 186 | 99-786-7949 |
| ENVIROGARD M770 White | 2 | 25 | 15.6 | 3 hrs | # | 78 | 99-231-3852 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|---|---|---|---|---|---|---|
| S8. <u>INTERIOR WET COMPARTMENTS (Complete Represervation)</u>  <u>Chugoku Paints (UK) Ltd</u> UMEGUARD HS SILVER AQUALIFE GLOSS FINISH White <u>Hempel Paints Ltd</u> HEMUDUR 4588 HEMPEL'S WATER BASED EPOXY 4858 White <u>International Paint Ltd</u> INTERGARD 5000 Grey BS 4800 00A01 INTERGARD 1735 White <u>Jotun Paints (Europe) Limited</u> WATERFINE PRIMER Grey WATERFINE PRIMER White <u>Maker Coating Systems Ltd/PPG</u> AMERLOCK 400C AMERCOAT 300A White <u>Maker Coating Systems Ltd</u> SIGMACOVER 456 HS 7712 SIGMASHIELD 420 White <u>Leighs Paint</u> EPIGRIP C425V2 BIOGARD M630V2 White | 1 2 1 1 1 1 1 1 or 2 1 1 2 1 1 1 | 125 40 125 80 125 50 100 40 125 50 75 150 125 75 | 7.4 10 6.5 6.7 6.56 11.2 4.6 11.6 7 10.4 9.7 5.6 6.0 6.8 | 20 hrs 16 hrs 5 hrs 12 hrs 24 hrs 12 hrs 1.5 hrs 1.5 hrs 16 hrs 16 hrs 8 hrs 3½ hrs 5 hrs 24 hrs | 30 days 7 days # 15 days # # # # # 14 days # # | 158 132 198 36 179 132 60 60 106 0 277 239 186 0 | 99-763-0243 99-371-8400 99-803-7233 99-000-5256 99-462-9708 99-974-7400 17-108-8249 99-786-7949 99-313-4440 |
| S9. <u>GROUP EXHAUST VALVES</u> <u>Leighs Paint</u> DOX-ANODE 5V2 | 1 | 75 | 8.7 | 24 hrs | # | 470 | |
| S10. <u>DSRV SEATING</u> <u>Leighs Paint</u> EPIGRIP C425V2 EPIDECK L716 | 1 2 | 175 75 | 4.3 6.8 | 8 hrs 4 hrs | # # | 186 420 | 99-786-7949 99-225-0689 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S11. INTERIOR PRESSURE HULL SURFACE Emergency Cooling Tanks | | | | | | | |
| a) <u>S Class Soft and Saddle Tanks</u> <i>Hempel Paints Ltd</i> | | | | | | | |
| GALVOSIL 1570 – Approved by Rolls Royce | 1 | 75 | 8.53 | 36 hrs | # | 535 | 99-593-8923 |
| <i>International Paint Ltd</i> | | | | | | | |
| INTERGARD 5000 – Pending Approval | 2 | 125 | 6.56 | 12 hrs | 3 months | 179 | 99-000-5256 |
| b) <u>Trafalgar Class Hard Tank</u> <i>International Paint Ltd</i> | | | | | | | |
| INTERGARD 5000 – Pending Approval | 2 | 125 | 6.56 | 12 hrs | 3 months | 179 | 99-000-5256 |
| <i>Leighs Paint</i> | | | | | | | |
| EPIGRIP C251 – Pending Approval | 2 | 125 | 5.9 | 24 hrs | 28 days | 235 | 99-284-3464 |
| <i>Maker Coating Systems Ltd</i> | | | | | | | |
| SIGMA PHENGUARD 930 (Primer) – Approved by Rolls Royce | 1 | 100 | 6.6 | 36 hrs | 21 days | 300 | 99-667-6118 |
| SIGMA PHENGUARD 935 (Coating) – Approved by Rolls Royce | 1 | 100 | 6.6 | 24 hrs | 21 days | 300 | 99-925-0882 |
| SIGMA PHENGUARD 940 (Finish) – Approved by Rolls Royce | 1 | 100 | 6.6 | 24 hrs | 21 days | 300 | 99-976-1657 |
| SIGMAGUARD 795 (Maintenance) | 2 | 150 | 5.0 | 10hrs | 21 days | 273 | |
| <i>Maker Coating Systems Ltd</i> | | | | | | | |
| CORROLESS EPF – Approved by Rolls Royce | 1 | 200 | 4.8 | 16hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 – Approved by Rolls Royce | 1 | 200 | 4.8 | 16hrs | 3 days | 93 | 99-337-0778 |
| c) <u>Trafalgar Class Jacket Tank</u> <i>International Paint Ltd</i> | | | | | | | |
| INTERGARD 5000 - Approved by Rolls Royce | 2 | 125 | 6.56 | 12 hrs | 3 months | 179 | 99-000-5256 |
| <i>Maker Coating Systems Ltd</i> | | | | | | | |
| CORROLESS EPF – Approved by Rolls Royce | 1 | 200 | 4.8 | 16hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 – Approved by Rolls Royce | 1 | 200 | 4.8 | 16hrs | 3 days | 93 | 99-337-0778 |
| AMERLOCK 400C – Approved by Rolls Royce | 2 | 125 | 7 | 16 hrs | 3 days | 106 | 17-108-8248 |
| <i>Leighs Paint</i> | | | | | | | |
| EPIGRIP M922 | 2 | 200 | 4.2 | 4hrs | # | 143 | 99-834-8384 |
| EPIGRIP C251 – Pending Approval | 2 | 125 | 5.9 | 24 hrs | 28 days | 235 | 99-284-3464 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S11. (cont) INTERIOR SURFACES | | | | | | | |
| d) <u>Vanguard Class High Pressure Decay Heat Removal Tank (HPDR)</u> | | | | | | | |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERGARD 5000 – Pending Approval | 2 | 125 | 6.56 | 12 hrs | 3 months | 179 | 99-000-5256 |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP C251 – Pending Approval | 2 | 125 | 5.9 | 24 hrs | 28 days | 235 | 99-284-3464 |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| CORROLESS EPF – Pending Approval | 1 | 200 | 4.8 | 16hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 – Pending Approval | 1 | 200 | 4.8 | 16hrs | 3 days | 93 | 99-337-0778 |
| AMERLOCK 400C – Pending Approval | 2 | 125 | 7 | 16 hrs | 3 days | 106 | 17-108-8248 |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| SIGMA PHENGUARD 930 (Primer) – Approved by Rolls Royce | 1 | 100 | 6.6 | 36 hrs | 21 days | 315 | 99-667-6118 |
| SIGMA PHENGUARD 935 (Coating) – Approved by Rolls Royce | 1 | 100 | 6.6 | 24 hrs | 21 days | 315 | 99-925-0882 |
| SIGMA PHENGUARD 940 (Finish) – Approved by Rolls Royce | 1 | 100 | 6.6 | 24 hrs | 21 days | 315 | 99-976-1657 |
| SIGMAGUARD 795 (Maintenance) | 2 | 150 | 5.0 | 10hrs | 21 days | 273 | |
| EXTERNAL SURFACES | | | | | | | |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERGARD 5000 – Pending Approval | 2 | 125 | 6.56 | 12 hrs | 3 months | 179 | 99-000-5256 |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP C251 – Pending Approval | 2 | 125 | 5.9 | 24 hrs | 28 days | 235 | 99-284-3464 |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| CORROLESS EPF | 1 | 200 | 4.8 | 16hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 | 1 | 200 | 4.8 | 16hrs | 3 days | 93 | 99-337-0778 |
| AMERLOCK 400C | 2 | 125 | 7 | 16 hrs | 3 days | 106 | 17-108-8248 |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| SIGMA PHENGUARD 930 (Primer) – Approved by Rolls Royce | 1 | 100 | 6.6 | 36 hrs | 21 days | 315 | 99-667-6118 |
| SIGMA PHENGUARD 935 (Coating) – Approved by Rolls Royce | 1 | 100 | 6.6 | 24 hrs | 21 days | 315 | 99-925-0882 |
| SIGMA PHENGUARD 940 (Finish) – Approved by Rolls Royce | 1 | 100 | 6.6 | 24 hrs | 21 days | 315 | 99-976-1657 |
| SIGMAGUARD 795 (Maintenance) | 2 | 150 | 5.0 | 10hrs | 21 days | 273 | |
| e) <u>Astute Class</u> | | | | | | | |
| <u>Advanced Polymer Coatings</u> | | | | | | | |
| SILOXIRANE 2031LE – Approved by Rolls Royce | 2 | 150 | 1.72 | 24 hrs | 3 days | 102 | |
| <u>Leighs Paint</u> | | | | | | | |
| DURAGLASS 41V – Approved by Rolls-Royce | 2 | 500 | 0.84 | 2½ hrs | # | 150 | |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S12. REACTOR COMPARTMENT | | | | | | | |
| a) Interior surfaces | | | | | | | |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR NPP 55672-10000 White | 3 | 75 | 8.5 | 24 hrs | 21 days | 327 | |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERGARD 5000 | 1 | 125 | 6.56 | 12 hrs | # | 179 | 99-000-5256 |
| INTERGARD 1735 White | 2 | 50 | 11.20 | 12 hrs | # | 132 | |
| <u>Maker Coating Systems Ltd/PPG</u> | | | | | | | |
| AMERLOCK 400C | 1 | 125 | 7 | 16 hrs | # | 106 | 99-974-7400 |
| AMERCOAT 300A White | 2 | 50 | 10.4 | 16 hrs | # | 0 | 17-108-8249 |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP C400V3 | 1 | 200 | 9.3 | 5 hrs | # | 257 | |
| EPIGRIP H766 White | 1 | 50 | 14 | 5 hrs | # | 395 | 99-623-9946 |
| <u>HEAT RESISTANT ALUMINIUM >250°C</u> | | | | | | | |
| <u>Firwood Paints Ltd</u> | | | | | | | |
| FIRGLO 64 | 1-2 | | | 4 hrs | | | |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERTHERM 50 | 1-2 | 25 | 18 | 12hrs | # | 495 | 99-257-1455 |
| b) External surfaces | | | | | | | |
| See S1. but note dft not to exceed that stated in BR3939 Section 12 | | | | | | | |
| S13. INTERIOR DECKS | | | | | | | |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP C425V2 | 1 | 175 | 4.3 | 8 hrs | # | 186 | 99-786-7949 |
| BIOGARD M630V2 | 1 | 75 | 6.8 | 24 hrs | # | 0 | 99-255-5237 |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERGARD 5000 | 1 | 125 | 6.56 | 12 hrs | # | 179 | 99-000-5256 |
| INTERGARD 1735 | 1 | 50 | 11.2 | 12 hrs | # | 132 | 99-255-0527 |
| <u>Maker Coating Systems Ltd/PPG</u> | | | | | | | |
| AMERLOCK 400C | 2 | 125 | 7 | 16 hrs | # | 106 | 99-383-2335 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S14. BATTERY COMPARTMENTS | | | | | | | |
| <u>Chugoku Paints (UK) Ltd</u> | | | | | | | |
| UMEGARD HS SILVER | 1 | 125 | 7.12 | 20 hrs | 7 days | 108 | 99-264-0145 |
| AQUALIFE GLOSS FINISH BS4800 00A01 | 2 | 40 | 10 | 16 hrs | 7 days | 132 | 99-757-9334 |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR 4588 | 1 | 150 | 5.5 | 5 hrs | # | 198 | 99-803-7233 |
| HEMPEL'S WATERBASED EPOXY 4858 BS4800 00A01 | 1 | 80 | 6.7 | 12 hrs | 15 days | 36 | 99-988-2715 |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERGARD 5000 BS4800 00A01 | 1 | 125 | 6.56 | 12 hrs | # | 179 | 99-000-5256 |
| <u>Jotun Paints (Europe) Limited</u> | | | | | | | |
| POLYMASTIC 2000 | 1 | 200 | 4.8 | 9 hrs | # | 80 | 99-395-8448 |
| POLYMASTIC 2000 BS4800 00A01 | 1 | 200 | 4.8 | 9 hrs | # | 80 | 99-665-9772 |
| <u>Maker Coating Systems Ltd/PPG</u> | | | | | | | |
| AMERLOCK 400C | 1 | 125 | 7 | 16 hrs | # | 106 | 99-974-7400 |
| AMERCOAT 300A BS4800 00A01 | 1 | 50 | 10.4 | 16 hrs | # | 0 | 99-535-8577 |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP C425V2 | 1 | 100 | 7.5 | 4 hrs | # | 186 | 99 786 7949 |
| BIOGARD M630V2 BS4800 00A01 | 1 | 75 | 6.8 | 24 hrs | # | 0 | 99-535-5105 |
| S15. MACHINERY SPACE BILGES & MOUNTED MACHINERY RAFTS | | | | | | | |
| <u>Chugoku Paints (UK) Ltd</u> | | | | | | | |
| Primer: UMEGARD HS SILVER | 1 | 125 | 6.5 | 15 hrs | 10 days | 108 | 99-264-0146 |
| Primer: UMEGARD HS GREY | 1 | 125 | 6.5 | 15 hrs | 10 days | 158 | 99-126-9478 |
| <u>Finish for Mounted Machinery Rafts</u> | | | | | | | |
| CAMACRYL FINISH MAC Canary BS381C 309 | 1 | 40 | 11 | 24 hrs | # | 33 | 99-446-0554 |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| Primer: HEMPADUR 4588 WHITE | 1 | 150 | 5.5 | 5 hrs | # | 220 | 99-264-0387 |
| <u>Finish for Mounted Machinery Rafts</u> | | | | | | | |
| HEMUCRYL ENAMEL 5810 Canary BS381C 309 | 1 | 30 | 13.7 | 6 hrs | # | 70 | 99-858-1263 |
| <u>International Paint Ltd</u> | | | | | | | |
| Primer: INTERGARD 5000 | 1 | 175 | 4.68 | 12 hrs | 3 months | 179 | 99-000-5256 |
| <u>Finish for Mounted Machinery Rafts</u> | | | | | | | |
| INTERCRYL 700 Yellow RAL 1018 | 1 | 35 | 11.42 | 6 hrs | # | 18 | 99-774-1224 |
| <u>Jotun Paints (Europe) Limited</u> | | | | | | | |
| Primer: JOTAMASTIC 87 WHITE | 2 | 200 | 4.1 | 10 hrs | # | 130 | |
| <u>Finish for Mounted Machinery Rafts</u> | | | | | | | |
| WATERFINE TOPCOAT Canary BS381C 309 | 1 | 40 | 9.2 | 8 hrs | # | 105 | 99-352-4369 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S15. MACHINERY SPACE BILGES & MOUNTED MACHINERY RAFTS (cont.) | | | | | | | |
| <i>Maker Coating Systems Ltd/PPG</i> | | | | | | | |
| Primer: CORROLESS EPF | 1 | 200 | 4.8 | 16 hrs | 3 days | 80 | 25-150-0972 |
| Finish for Mounted Machinery Rafts | | | | | | | |
| AMERLOCK 400C YELLOW | 1 | 125 | 7 | 16 hrs | # | 106 | |
| <i>Maker Coating Systems Ltd</i> | | | | | | | |
| Primer: SIGMA NOVAGARD 840 7468 | 1 | 400 | 2.5 | 24 hrs | 2 months | 13 | |
| Finish for Mounted Machinery Rafts | | | | | | | |
| SIGMA AQUACOVER 45 7250 Canary BS381C 309 | 1 | 50 | 6.8 | 6 hrs | # | 17 | 99-182-2670 |
| <i>Leighs Paint</i> | | | | | | | |
| Primer: EPIGRIP M902 | 1 | 125 | 6.0 | 6.5 hrs | # | 219 | 99-421-0972 |
| Alternative Primer: EPIGRIP L524 | 1 | 125 | 5.1 | 12 hrs | # | 296 | 99-564-2934 |
| Finish for Mounted Machinery Rafts | | | | | | | |
| ENVIROGARD M770 Canary BS381C 309 | 1 | 25 | 15.6 | 3 hrs | # | 78 | 99-726-4136 |
| S16. OIL TANKS, LUBE OIL, HYDRAULIC, LP AIR TANKS ETC | | | | | | | |
| <i>Chugoku Paints (UK) Ltd</i> | | | | | | | |
| CLEANKEEP 5000* | 1 | 300 | 3.33 | 48 hrs | 14 days | 0 | |
| <i>Hempel Paints Ltd</i> | | | | | | | |
| HEMPADUR 85671 | 3 | 100 | 6.8 | 36 hrs | 5 days | 320 | |
| <i>International Paint Ltd</i> | | | | | | | |
| INTERLINE 850 (TLA850/A) | 2 | 125 | 6.08 | 8 hrs | 30 days | 212 | |
| <i>Jotun Paints (Europe) Limited</i> | | | | | | | |
| TANKGUARD STORAGE | 2 | 125 | 5.0 | 10 hrs | 30 days | 261 | |
| <i>Maker Coating Systems Ltd</i> | | | | | | | |
| CORROLESS EPF | 1 | 200 | 4.8 | 16 hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 Off White | 1 | 200 | 4.8 | 16 hrs | 3 days | 93 | 25-150-0973 |
| <i>Maker Coating Systems Ltd</i> | | | | | | | |
| SIGMAGUARD CSF 650 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| <i>Leighs Paint</i> | | | | | | | |
| EPIGRIP H735 | 1 | 125 | 5.4 | 6 | 3 days | 270 | 99-341-1160 |
| EPIGRIP H736 | 1 | 125 | 5.2 | 6 | 3 days | 283 | 99-850-0225 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--------------------------------------|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S17. POTABLE WATER TANKS | | | | | | | |
| <u>Chugoku Paints (UK) Ltd</u> | | | | | | | |
| CLEENKEEP 5000* | 1 | 300 | 3.33 | 48 hrs | 14 days | 0 | |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR 85671 | 3 | 100 | 6.8 | 36 hrs | 5 days | 320 | |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERLINE 925 | 1 | 300 | 3.35 | 48 hrs | 3 days | 1 | |
| <u>Jotun Paints (Europe) Limited</u> | | | | | | | |
| TANKGUARD AQUA | 2 | 225 | 4.44 | 10 hrs | 7 days | ? | |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| CORROLESS EPF | 1 | 200 | 4.8 | 16 hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 | 1 | 200 | 4.8 | 16 hrs | 3 days | 93 | 99-337-0778 |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| SIGMAGUARD CSF 650 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| <u>Leighs Paint</u> | | | | | | | |
| HYDROGARD H20V2 | 1 | 400 | 2.5 | 12hrs | 36 hrs | 0 | |
| S18. SLOP DRAIN TANKS | | | | | | | |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP C251 | 2 | 125 | 5.9 | 24 hrs | 28 days | 235 | 99-284-3464 |
| S19. AFFF TANKS | | | | | | | |
| <u>Chugoku Paints (UK) Ltd</u> | | | | | | | |
| CLEENKEEP 5000* | 1 | 300 | 3.33 | 48 hrs | 14 days | 0 | |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR MULTI STRENGTH 3553 | 2 | 250 | 4.0 | 24 hrs | 5 days | 0 | |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERLINE 704 | 2 | 125 | 4.24 | 23 hrs | 21 days | 385 | |
| <u>Jotun Paints (Europe) Limited</u> | | | | | | | |
| TANKGUARD AQUA | 2 | 225 | 4.44 | 10 hrs | 7 days | ? | |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| CORROLESS EPF | 1 | 200 | 4.8 | 16 hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 | 1 | 200 | 4.8 | 16 hrs | 3 days | 93 | 99-337-0778 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|---------------------------------------|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S19. AFFF TANKS (cont.) | | | | | | | |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| SIGMAGUARD CSF 585 7785 | 1 | 300 | 3.33 | 24 hrs | 20 days | 5 | |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP C251 | 2 | 125 | 5.9 | 24 hrs | 28 days | 235 | 99-284-3464 |
| S20. DEMINERALISED WATER TANKS | | | | | | | |
| <u>Chugoku Paints (UK) Ltd</u> | | | | | | | |
| CLEENKEEP 5000* | 1 | 300 | 3.33 | 48 hrs | 14 days | 0 | |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR MULTI STRENGTH 3553 | 2 | 250 | 4.0 | 24 hrs | 5 days | 0 | |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERLINE 925 (THA127/A) | 1 | 300 | 3.33 | 18 hrs | 3 days | 1 | |
| <u>Jotun Paints (Europe) Limited</u> | | | | | | | |
| TANKGUARD AQUA | 2 | 225 | 4.44 | 10 hrs | 7 days | ? | |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| CORROLESS EPF | 1 | 200 | 4.8 | 16 hrs | 3 days | 80 | 25-150-0972 |
| CORROLESS RF35 | 1 | 200 | 4.8 | 16 hrs | 3 days | 93 | 99-337-0778 |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| SIGMAGUARD CSF 650 7443 | 1 | 300 | 3.3 | 24 hrs | 20 days | 17 | |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP C251 | 2 | 125 | 5.9 | 24 hrs | 28 days | 235 | 99-284-3464 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--------------------------------------|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S21. HOLDING PRIMER | | | | | | | |
| a) <u>Blasted steelwork</u> | | | | | | | |
| <u>Chugoku Paints (UK) Ltd</u> | | | | | | | |
| NZ PRIMER S | 1 | 25 | 15.9 | 16 hrs | # | 641 | |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR 1557 | 1 | 40 | 13.5 | # | # | 430 | 99-943-1152 |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERGARD 269 | 1 | 30 | 15.67 | 6 hrs | # | 411 | 99-983-0743 |
| <u>Jotun Paints (Europe) Limited</u> | | | | | | | |
| EPOXY HOLDING PRIMER | 1 | 20 | 12.5 | 7 hrs | 7 days | 600 | |
| <u>Maker Coating Systems Ltd/PPG</u> | | | | | | | |
| SIGMACOVER 280 7417 | 1 | 50 | 11.4 | 8 hrs | 3 months | 432 | 99-569-7697 |
| <u>Leighs Paint</u> | | | | | | | |
| METAGARD L574 | 1 | 25 | 11.6 | 3 hrs | # | 594 | 99-895-9894 |
| b) <u>Damp Surfaces</u> | | | | | | | |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR 1557 | 1 | 40 | 13.5 | # | # | 430 | 99-943-1152 |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP M111 | 1 | 60 | 9.0 | 4hrs | # | 383 | 99-884-5957 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|-------------------|
| S22. PRIMERS FOR NON FERROUS METALS | | | | | | | |
| <u>Chugoku Paints (UK) Ltd</u> | | | | | | | |
| (a) <u>Aluminium</u> : ALP 500 | 1 | 50 | 11.6 | 10 hrs | # | 414 | 99-967-8636 |
| (b) <u>Stainless Steel</u> : UMEGUARD HS | 1 | 125 | 7.40 | 20 hrs | 30 days | 158 | 99-126-9478 |
| (c) <u>Zinc Spray</u> : GALVANITE 200 | 1 | 30 | 14.10 | 4 hrs | 30 days | 587 | 99-290-5829 |
| (d) <u>Galvanise</u> : GALVANITE 200 | 1 | 30 | 14.10 | 4 hrs | 30 days | 587 | 99-290-5829 |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| a) <u>Aluminium</u> HEMUCRYL TIE COAT 1820 (1 pack) or HEMPADUR 1555 (2 pack) | 1 | 20 | 19.0 | 24 hrs | 30 mins | 40 | 99-199-2908 |
| | 1 | 50 | 8.6 | 2 hrs | # | 515 | 99-870-0653 |
| b) <u>Stainless Steel</u> HEMUCRYL TIE COAT 1820 (1 pack) or HEMPADUR 1555 (2 pack) | 1 | 20 | 19.0 | 24 hrs | 30 mins | 40 | 99-199-2908 |
| | 1 | 50 | 8.6 | 2 hrs | # | 515 | 99-870-0653 |
| c & d) <u>Zinc Spray</u> HEMUCRYL TIE COAT 1820 (1 pack) or <u>Galvanise</u> HEMPADUR 1555 (2 pack) | 1 | 20 | 19.0 | 24 hrs | 30 mins | 40 | 99-199-2908 |
| | 1 | 50 | 8.6 | 2 hrs | # | 515 | 99-870-0653 |
| e) <u>Indicator coat for FRP</u> GELPROTECT SFE200 Cream | 1 | 200 | 5.0 | 8 hrs | 5 days | 10 | 99-517-4318 |
| <u>International Paint Ltd</u> | | | | | | | |
| a) – d) <u>Aluminium, Stainless steel, Zinc Spray or Galvanised</u> | | | | | | | |
| <u>Standard</u> INTERGARD 269 | | 30 | 15.67 | 6 hrs | # | 411 | 99-983-0743 |
| <u>Alternative</u> INTERGARD 276 | | 30 | 15.67 | 6 hrs | # | 411 | |
| <u>Jotun Paints (Europe) Limited</u> | | | | | | | |
| a) <u>Aluminium</u> : WATERFINE PRIMER | 1 | 60 | 7.6 | 1.5 hrs | # | 100 | 99-462-9708 |
| b) <u>Stainless Steel</u> : WATERFINE PRIMER | 1 | 60 | 7.6 | 1.5 hrs | # | 100 | 99-462-9708 |
| c & d) <u>Zinc Spray/Galvanise</u> : WATERFINE PRIMER | 1 | 60 | 7.6 | 1.5 hrs | # | 100 | 99-462-9708 |
| e) <u>FRP Indicator Coat</u> : BALLOXY HB Light (Green) | 1 | 200 | 4.1 | 10 hrs | # | 167 | 17-108-7825 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|-----------------|-----------------------|-------------------------------|---------------------|---------------------|-----------------|----------------------------|
| S22. PRIMERS FOR NON FERROUS METALS (cont) | | | | | | | |
| <u>Maker Coating Systems Ltd/PPG</u> | | | | | | | |
| a) <u>Aluminium:</u> AMERLOCK 400C | 1 | 125 | 7 | 16 hrs | # | 106 | 99-974-7400 |
| b) <u>Stainless Steel:</u> SIGMACOVER 280 7417 | 1 | 50 | 11.4 | 8 hrs | 6 months | 432 | 99-569-7697 |
| c) <u>Zinc Spray:</u> AMERLOCK 400C | 1 | 125 | 7 | 16 hrs | # | 106 | 99-974-7400 |
| d) <u>Galvanise:</u> SIGMACOVER 280 7417 | 1 | 50 | 11.4 | 8 hrs | 3 months | 432 | 99-569-7697 |
| e) <u>Indicator Coat for FRP:</u> AMERLOCK 400C Green RAL 6011 | 1 | 125 | 7 | 16 hrs | # | 106 | 17-120-4829 |
| <u>Leighs Paint</u> | | | | | | | |
| a) <u>Aluminium:</u> EPIGRIP H795 | 1 | 35 | 10.9 | 4 hrs | # | 575 | 99-225-0195 |
| b) <u>Stainless Steel:</u> EPIGRIP H795 | 1 | 35 | 10.9 | 4 hrs | # | 575 | 99-225-0195 |
| c) <u>Zinc Spray:</u> METAGARD L574 | 1 | 25 | 11.6 | 4 hrs | # | 594 | 99-895-9894 |
| d) <u>Galvanise:</u> EPIGRIP H795 | 1 | 35 | 10.9 | 4 hrs | # | 575 | 99-225-0195 |
| e) <u>Indicator Coat for FRP:</u> EPIGRIP C425V2 Off White | 1 | 100 | 7.5 | 4 hrs | # | 186 | 99-133-8714 |
| S23. HIGH EROSION AREAS | | | | | | | |
| <u>Hempel Paints Ltd</u> | | | | | | | |
| HEMPADUR MULTISTRENGTH GF3597 | 1 | 300 | 2.9 | 16 hrs | 30 days | 180 | |
| <u>International Paint Ltd</u> | | | | | | | |
| INTERZONE 505 | 1 | 300 | 3.0 | 6 | 4 days | 157 | |
| <u>Maker Coating Systems Ltd</u> | | | | | | | |
| CORROLESS EPF | 2 | 200 | 4.8 | 16 | 3 days | 80 | 99-212-7555 |
| <u>Leighs Paint</u> | | | | | | | |
| EPIGRIP M922 | 1 | 400 | 2.1 | 3 hrs | # | 143 | 99-834-8384 |
| S24. BENEATH TILING | | | | | | | |
| <u>Wessex Resins</u> | | | | | | | |
| WRA 518 UW 45 (WRA4501) | | | | | | | 99-568-6036 99-009-0811 |

ANNEXE J SUBMARINES

| Proposed Systems/Materials | Number of Coats | NDFT per coat microns | Theo SR m ² /litre | Min Recoat Interval | Max Recoat Interval | VOC gms per ltr | NATO Stock Number |
|--|---|---|---|--|---|--|---|
| S25. <u>SYSTEM FOR COATING NATURAL RUBBER MOUNTS</u> Applied by Mount supplier not to be touched up once fitted <u>Dunlop Precision Rubber Ltd</u> DUNLOP NPL 100 or <u>Maker Coating Systems Ltd</u> GUMMIPAIN - ORANGE | 2 | 25 | | | | | |
| S26. <u>SYSTEM FOR COATING INTERNAL NUTS AND BOLTS AND TO FILL GAPS BETWEEN CANNING PLATES AND LEAD</u> <u>Maker Coating Systems Ltd</u> CORROLESS CCI 355 CORROSION INHIBITOR (HD GREASE) | 1 | N/A | | | N/A | N/A | 99-676-5736 |
| S27. <u>SEA WATER TANKS</u> <u>Chugoku Paints (UK) Ltd</u> (i) UMEGUARD HS SILVER* UMEGUARD HS GREY or (ii) NOVA 2000 <u>Hempel Paints Ltd</u> HEMPADUR 4507 <u>International Paint Ltd</u> INTERGARD 5000 <u>Jotun Paints (Europe) Limited</u> BALLOXY HB LIGHT <u>Maker Coating Systems Ltd</u> CORROLESS EPF <u>Maker Coating Systems Ltd/ PPG</u> SIGMAGUARD CSF650 <u>Leighs Paint</u> EPIGRIP L524 | 1 1 2 2 2 2 2 1 2 | 125 125 125 150 125 150 200 300 125 | 6.50 6.50 6.50 4.8 6.56 5.5 4.8 3.3 5.1 | 15 hrs 15 hrs 15 hrs 16 hrs 12 hrs 10 hrs 16 hrs 24 hrs 12 hrs | 10 days 10 days 10 days 10 days 3 months # 3 days 20 days # | 108 158 173 270 179 150 80 143 296 | 99-264-0145 99-126-9478 99-149-2439 99-000-5256 17-108-7824 25-150-0972 99-564-2934 |

ANNEXE J SUBMARINES

| Supplier | Material | BR Class | VOC Compliant | NSN |
|-------------------------|---|----------|---------------|------------------|
| | Chugoku Paints (UK) Ltd | | | |
| Chugoku Paints (UK) Ltd | CAMACRYL FINISH MAC White | See 4.3 | 86 g/l | 8010-99-380-7010 |
| Chugoku Paints (UK) Ltd | UMEGUARD HS SILVER | See 4.3 | 158 g/l | 8010-99-264-0145 |
| Chugoku Paints (UK) Ltd | CAMACRYL FINISH MAC Ash Grey BS4800 00A01 | See 4.3 | 86 g/l | 8010-99-676-4126 |
| Chugoku Paints (UK) Ltd | ALP 500 | See 4.3 | 414 g/l | 8010-99-967-8636 |
| Chugoku Paints (UK) Ltd | GALVANITE 200 White | See 4.3 | 495 g/l | 8010-99-995-4247 |
| Chugoku Paints (UK) Ltd | GALVANITE 200 White | See 4.3 | 495 g/l | 8010-99-290-5829 |
| Chugoku Paints (UK) Ltd | UMEGUARD HS Grey | See 4.3 | 158 g/l | 8010-99-126-9478 |
| Chugoku Paints (UK) Ltd | UMEGUARD HS White | See 4.3 | 158 g/l | 8010-99-564-2409 |
| Chugoku Paints (UK) Ltd | CAMACRYL FINISH MAC Canary BS381C 309 | See 4.3 | 86 g/l | 8010-99-446-0554 |
| Chugoku Paints (UK) Ltd | CAMACRYL FINISH MAC Wedgewood Blue BS4800 18D43 | See 4.3 | 86 g/l | 8010-99-665-3660 |
| Chugoku Paints (UK) Ltd | CAMACRYL FINISH MAC Dark Blue BS4800 18C39 | See 4.3 | 86 g/l | 8010-99-862-0034 |
| Chugoku Paints (UK) Ltd | CAMACRYL FINISH MAC Mid Brunswick Green BS381C 226 | See 4.3 | 86 g/l | 8010-99-794-2129 |
| Chugoku Paints (UK) Ltd | CAMACRYL FINISH MAC Azure Blue BS381C 104 | See 4.3 | 86 g/l | 8010-99-366-5444 |
| Chugoku Paints (UK) Ltd | UMEGUARD HS SILVER | See 4.3 | 158 g/l | 8010-99-763-0243 |
| | Hempel UK Limited | | | |
| Hempel UK Limited | HEMPELS WATER BASED EPOXY 48580 BS4800 00A01 | See 4.3 | 25 g/l | 8010-99-988-2715 |
| Hempel UK Limited | HEMPELS GALVOSIL 15700 | See 4.3 | 535 g/l | 8010-99-593-8923 |
| Hempel UK Limited | HEMPADUR 15570 LIGHT GREY 12430 | See 4.3 | 430 g/l | 8010-99-170-5097 |
| Hempel UK Limited | HEMUCRYL ENAMEL 5810 Dark Blue BS4800 18C39 | See 4.3 | 150 g/l | 8010-99-290-5925 |
| Hempel UK Limited | HEMUCRYL ENAMEL 5810 Wedgewood Blue BS4800 18D43 | See 4.3 | 150 g/l | 8010-99-317-6235 |
| Hempel UK Limited | HEMUCRYL ENAMEL 5810 Canary BS381C 309 | See 4.3 | 150 g/l | 8010-99-858-1263 |
| Hempel UK Limited | HEMPADUR 4515o White | See 4.3 | 180 g/l | 8010-99-411-0494 |
| Hempel UK Limited | HEMUCRYL ENAMEL 5810 White | See 4.3 | 150 g/l | 8010-99-299-0228 |
| Hempel UK Limited | HEMPELS WATER BASED EPOXY 48580 BS4800 14C39 (Green) | See 4.3 | 25 g/l | 8010-99-279-8221 |
| Hempel UK Limited | HEMUCRYL PRIMER 1810 | See 4.3 | 200 g/l | 8010-99-909-6026 |
| Hempel UK Limited | HEMPADUR 15550 | See 4.3 | 515 g/l | 8010-99-870-0653 |
| Hempel UK Limited | HEMPELS WATER BASED EPOXY 48580 BS4800 14C39 (Green) | See 4.3 | 25 g/l | 8010-99-279-8221 |
| Hempel UK Limited | HEMPADUR 4515o | See 4.3 | 180 g/l | 8010-99-702-5502 |
| Hempel UK Limited | HEMPELS WATER BASED EPOXY 48580 BS381C 676 (Light Weatherwork Grey) | See 4.3 | 25 g/l | 8010-99-976-9118 |
| Hempel UK Limited | HEMPELS WATER BASED EPOXY 48580 Black | See 4.3 | 25 g/l | 8010-99-864-5046 |
| Hempel UK Limited | HEMUCRYL ENAMEL 5810 Lt Brunswick Green BS381C 225 | See 4.3 | 150 g/l | 8010-99-831-8959 |
| Hempel UK Limited | HEMUCRYL ENAMEL 5810 Azure Blue BS381C 104 | See 4.3 | 150 g/l | 8010-99-382-4025 |
| Hempel UK Limited | HEMUCRYL ENAMEL 5810 Mid Brunswick Green BS381C 226 | See 4.3 | 150 g/l | 8010-99-162-2531 |
| Hempel UK Limited | HEMUCRYL ENAMEL 5810 BS4800 00A01 | See 4.3 | 150 g/l | 8010-99-660-9288 |
| Hempel UK Limited | HEMUCRYL ENAMEL 5810 Signal Red BS381C 537 | See 4.3 | 150 g/l | 8010-99-250-8046 |
| Hempel UK Limited | HEMUCRYL TI-COAT 18200 | See 4.3 | 118 g/l | 8010-99-199-2908 |
| Hempel UK Limited | HEMPADUR 15550 Off White 1163 | See 4.3 | 515 g/l | 8010-99-700-4191 |
| Hempel UK Limited | HEMUCRYL TI-COAT 18200 Red 50710 | See 4.3 | 118 g/l | 8010-99-199-2908 |
| Hempel UK Limited | HEMUDUR 1850 Grey 12170 | See 4.3 | 85 g/l | 8010-99-867-8090 |
| Hempel UK Limited | HEMPADUR 15550 Off White 1163 | See 4.3 | 515 g/l | 8010-99-870-0653 |
| Hempel UK Limited | HEMPADUR 4515o Red 50630 | See 4.3 | 180 g/l | 8010-99-535-5832 |
| Hempel UK Limited | HEMUCRYL ENAMEL 5810 BS381C 676 (Light Weatherwork Grey) | See 4.3 | 150 g/l | 8010-99-149-2439 |
| Hempel UK Limited | HEMUCRYL PRIMER 1810 | See 4.3 | 200 g/l | 8010-99-909-6026 |
| Hempel UK Limited | HEMPADUR 15550 | See 4.3 | 515 g/l | 8010-99-700-4191 |
| Hempel UK Limited | HEMUCRYL ENAMEL 5810 Black | See 4.3 | 150 g/l | 8010-99-175-1334 |

ANNEXE J SUBMARINES

| Supplier | Material | BR Class | VOC Compliant | NSN |
|-------------------------------|--|----------|---------------|------------------|
| International Paint Ltd | | | | |
| International Paint Ltd | INTERGARD FWA274/FWA278 Red | See 4.3 | 166 g/l | 8010-99-337-6056 |
| International Paint Ltd | INTERGARD 1735 WB QDE000/QDA049 BS4800 00A01 | See 4.3 | 45 g/l | 8010-99-255-0527 |
| International Paint Ltd | INTERGARD 1735 WB Dark Sea Grey BS381C 640 | See 4.3 | 132 g/l | 8010-99-702-0607 |
| International Paint Ltd | INTERCRYL 506 GREY WPA300 | See 4.3 | 120 g/l | 8010-99-147-1269 |
| International Paint Ltd | INTERCRYL 700 White WXB000 | See 4.3 | 135 g/l | 8010-99- |
| International Paint Ltd | INTERCRYL 700 Yellow RAL 1018 | See 4.3 | 135 g/l | 8010-99-774-1224 |
| International Paint Ltd | INTERGARD 1735 WB Green BS4800 14C39 | See 4.3 | 132 g/l | 8010-99-483-1994 |
| International Paint Ltd | INTERGARD 740 ECY999/A Black | See 4.3 | 420 g/l | 8010-99-285-3824 |
| Jotun Paints (Europe) Limited | | | | |
| Jotun Paints (Europe) Limited | PRIMASTIC UNIVERSAL MD | See 4.3 | 240 g/l | 8010-99-509-7172 |
| Jotun Paints (Europe) Limited | WATERFINE PRIMER Light Grey | See 4.3 | 50 g/l | 8010-99-462-9708 |
| Jotun Paints (Europe) Limited | WATERFINE TOPCOAT Signal Red BS381C 537 | See 4.3 | 197 g/l | 8010-99-921-4654 |
| Jotun Paints (Europe) Limited | WATERFINE TOPCOAT Lt Brunswick Green BS381C 225 | See 4.3 | 197 g/l | 8010-99-131-6457 |
| Jotun Paints (Europe) Limited | WATERFINE TOPCOAT White | See 4.3 | 197 g/l | 8010-99-372-9140 |
| Jotun Paints (Europe) Limited | WATERFINE TOPCOAT Wedgwood Blue BS4800 18D43 | See 4.3 | 197 g/l | 8010-99-212-5714 |
| Jotun Paints (Europe) Limited | WATERFINE TOPCOAT Azure Blue BS381C 104 | See 4.3 | 197 g/l | 8010-99-186-9127 |
| Jotun Paints (Europe) Limited | WATERFINE TOPCOAT Dark Blue BS4800 18C39 | See 4.3 | 197 g/l | 8010-99-347-9130 |
| Jotun Paints (Europe) Limited | WATERFINE TOPCOAT Lt Weatherwork Grey BS381C 676 | See 4.3 | 197 g/l | 8010-99-989-6214 |
| Jotun Paints (Europe) Limited | WATERFINE TOPCOAT CANARY BS381C 309 | See 4.3 | 197 g/l | 8010-99-352-4369 |
| Jotun Paints (Europe) Limited | WATERFINE TOPCOAT Black | See 4.3 | 197 g/l | 8010-99-877-1641 |
| Jotun Paints (Europe) Limited | WATERFINE TOPCOAT Mid Brunswick Green BS381C 226 | See 4.3 | 197 g/l | 8010-99-873-4271 |
| Jotun Paints (Europe) Limited | WATERFINE TOPCOAT Ash Grey BS4800 00A01 | See 4.3 | 197 g/l | 8010-99-272-2784 |
| Leighs Paints | | | | |
| Leighs Paints | ENVIROGARD M770 White | See 4.3 | 128 g/l | 8010-99-231-3852 |
| Leighs Paints | ENVIROGARD M770 Black | See 4.3 | 128 g/l | 8010-99-768-1426 |
| Leighs Paints | ENVIROGARD M770 Signal Red BS381C 537 | See 4.3 | 128 g/l | 8010-99-225-7155 |
| Leighs Paints | ENVIROGARD M770 Canary BS381C 309 | See 4.3 | 128 g/l | 8010-99-726-4136 |
| Leighs Paints | ENVIROGARD M770 Dark Blue BS4800 18C39 | See 4.3 | 128 g/l | 8010-99-723-3650 |
| Leighs Paints | ENVIROGARD M770 Azure Blue BS381C 104 | See 4.3 | 128 g/l | 8010-99-878-8150 |
| Leighs Paints | ENVIROGARD M770 Ash Grey BS4800 00A01 | See 4.3 | 128 g/l | 8010-99-517-5228 |
| Leighs Paints | ENVIROGARD M770 Lt Brunswick Green BS381C 225 | See 4.3 | 128 g/l | 8010-99-313-9445 |
| Leighs Paints | ENVIROGARD M770 Mid Brunswick Green BS381C 226 | See 4.3 | 128 g/l | 8010-99-862-5170 |
| Leighs Paints | ENVIROGARD M770 Grey BS381C 676 | See 4.3 | 128 g/l | 8010-99-833-4765 |
| Leighs Paints | ENVIROGARD M770 Wedgwood Blue BS4800 18D43 | See 4.3 | 128 g/l | 8010-99-723-3651 |
| Leighs Paints | EPIGRIP H795 | See 4.3 | 575 g/l | 8010-99-225-0195 |
| Leighs Paints | EPIGRIP C251 | See 4.3 | 235 g/l | 8010-99-284-3464 |
| Leighs Paints | EPIGRIP M111 | See 4.3 | 383 g/l | 8010-99-884-5957 |
| Leighs Paints | EPIGRIP M902 Aluminium | See 4.3 | 219 g/l | 8010-99-421-0972 |
| Leighs Paints | EPIGRIP L524 Aluminium | See 4.3 | 296 g/l | 8010-99-216-0021 |
| Leighs Paints | EPIGRIP L524 White | See 4.3 | 296 g/l | 8010-99-564-2934 |
| Leighs Paints | BIOGARD M630V2 Black | See 4.3 | 0 g/l | 8010-99-739-8402 |
| Leighs Paints | BIOGARD M630V2 White | See 4.3 | 0 g/l | 8010-99-313-4440 |
| Leighs Paints | BIOGARD M630V2 Green BS4800 14C39 | See 4.3 | 0 g/l | 8010-99-255-5237 |
| Leighs Paints | BIOGARD M630V2 Grey BS381C 676 | See 4.3 | 0 g/l | 8010-99-131-6908 |
| Maker Coating Systems Ltd | | | | |
| Maker Coating Systems Ltd | SIGMA AQUACOVER 45 7250 Black | See 4.3 | 17g/l | 8010-99-500-7412 |
| Maker Coating Systems Ltd | SIGMA AQUACOVER 45 7250 Mid Brunswick Green BS381C 226 | See 4.3 | 17g/l | 8010-99-269-1301 |
| Maker Coating Systems Ltd | SIGMA AQUACOVER 45 7250 Wedgwood Blue BS4800 18D43 | See 4.3 | 17g/l | 8010-99-471-2071 |
| Maker Coating Systems Ltd | SIGMA AQUACOVER 45 7250 Azure Blue BS381C 104 | See 4.3 | 17g/l | 8010-99-863-5457 |
| Maker Coating Systems Ltd | SIGMA AQUACOVER 45 7250 Canary BS381C 309 | See 4.3 | 17g/l | 8010-99-182-2670 |
| Maker Coating Systems Ltd | SIGMA AQUACOVER 45 7250 Dark Blue BS4800 18C39 | See 4.3 | 17g/l | 8010-99-957-7697 |
| Maker Coating Systems Ltd | SIGMA AQUACOVER 25 7150 Buff | See 4.3 | 37g/l | 8010-99-321-6318 |
| Maker Coating Systems Ltd | SIGMA AQUACOVER 45 7250 Lt Brunswick Green BS381C 225 | See 4.3 | 17g/l | 8010-99-338-4734 |
| Maker Coating Systems Ltd | SIGMA AQUACOVER 45 7250 Signal Red BS381C 537 | See 4.3 | 17g/l | 8010-99-880-0100 |
| Maker Coating Systems Ltd | SIGMA AQUACOVER 45 7250 White | See 4.3 | 17g/l | 8010-99-225-7360 |
| Maker Coating Systems Ltd | AMERCOAT 300A Black | See 4.3 | 0 g/l | 8010-17-115-8450 |
| Maker Coating Systems Ltd | AMERCOAT 300A White | See 4.3 | 0 g/l | 8010-17-108-8249 |
| Maker Coating Systems Ltd | AMERCOAT 300A BS4800 00A01 Ash Grey | See 4.3 | 0 g/l | 8010-99-535-8577 |
| Maker Coating Systems Ltd | AMERCOAT 300A BS4800 14C39 Green | See 4.3 | 0 g/l | 8010-17-113-5690 |
| Maker Coating Systems Ltd | AMERLOCK 400C Grey | See 4.3 | 106 g/l | 8010-99-974-7400 |
| Maker Coating Systems Ltd | AMERLOCK 400C Black | See 4.3 | 106 g/l | 8010-17-106-6001 |
| Maker Coating Systems Ltd | AMERLOCK 400C White | See 4.3 | 106 g/l | 8010-17-108-8248 |
| Maker Coating Systems Ltd | CORROLESS EPF Buff | See 4.3 | 80 g/l | 8010-25-150-0972 |
| Maker Coating Systems Ltd | CORROLESS EPF Black | See 4.3 | 80 g/l | 8010-99-212-7555 |
| Maker Coating Systems Ltd | CORROLESS RF 35 Off White | See 4.3 | 93 g/l | 8010-25-150-0973 |
| Maker Coating Systems Ltd | CORROLESS RF 35 | See 4.3 | 93 g/l | 8010-99-337-0778 |

INTENTIONALLY BLANK



INTENTIONALLY BLANK