


INVENTORY OF HAZARDOUS MATERIAL

MV EUROFERRY
OLYMPIA***Technical Report N° 200618/D1***

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Revision Number	Revision Date	Description of changes
01	05/05/2022	Updating Part II and III
02	21/02/2023	Updating quantity in Part II and III
03	06/03/2023	Inspection on board to verify the quantities in Part II and III
04	28/03/23	Updating quantity in Part II and III

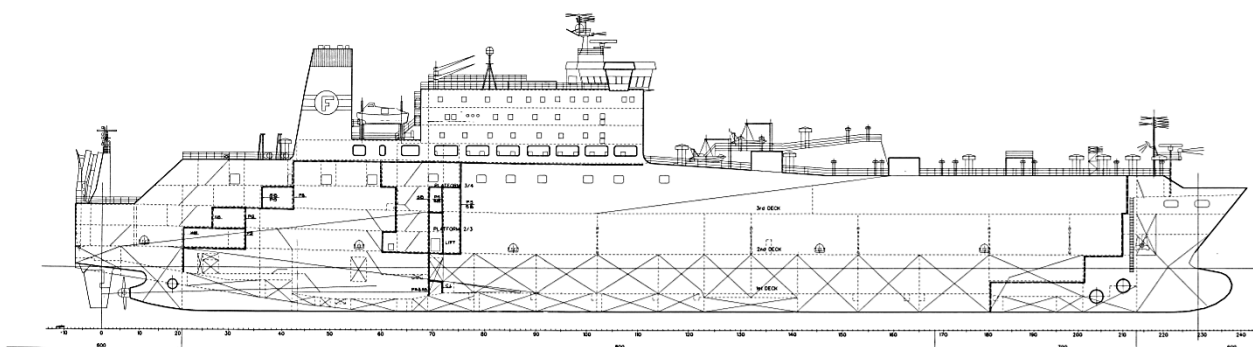
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1 GENERAL DESCRIPTION

Vessel's name	MV EUROFERRY OLYMPIA
Flag/Port of Registry	Italy [IT]
IMO No	9010175
Ship Type	Ro-Ro/Passenger Ship
Built Year	1995
Shipbuilder	Stocznia Gdańsk S.A..
Gross Tonnage	33588
Deadweight	11682 t
Length x Breadth	183.08 x 28.7 m
Shipowner	Grimaldi Euromed S.p.A.



2 SCOPE

Following the request of Grimaldi Euromed S.p.A., SIGE MARINE S.r.l. has developed the Part I, II and III of the Inventory of Hazardous Material (IHM) for the ship MV EUROFERRY OLYMPIA, in accordance with the European Regulation on Ship Recycling n° 1257/2013 and the related IMO Resolution MEPC.269(68) "2015 Guidelines for the Development of the Inventory of Hazardous Materials".

In order to verify the quantity of waste and stores present on board and reported in the IHM's Part II and Part III, on the 02/03/2023, our HazMat Expert Gianfranco Schirinzi carried out an onboard inspection and on the 28/03/23 this document was updated for the quantity changes in few tanks.

The objective of this report is to provide, as complete as possible, the mapping of the hazardous materials present on board the MV EUROFERRY OLYMPIA based on the analysis of the available documentations and on the on board visual and sampling check, aimed at the development of the inventory, carried out by SIGE MARINE.

The IHM Part I lists the hazardous materials contained in the structure, hull, equipment, machinery, paints and coating systems, such as asbestos, polychlorinated biphenyls (PCBs), ozone depleting substances, organotin compounds, heavy metals and other hazardous substances.

The present Inventory of Hazardous Material is composed by the present document and the following Annexes which are part of the report:

- Annex 1 - "Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009", SR/CONF/45.
- Annex 2 - "2015 Guidelines for the development of the Inventory of Hazardous Materials", MEPC.269(68).
- Annex 3 - "Regulation (EU) No 1257/2013 of the European Parliament and of the Council of 20 November 2013 on ship recycling and amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC", L 330/1.
- Annex 4 - Visual Sampling Check Plan (VSCP).
- Annex 5 - MV EUROFERRY OLYMPIA – Survey Report Hazardous Material Investigation – SIGE MARINE Srl
- Annex 6 - Laboratory test reports – "Rapporto di prova n° 20LA11261 del 18/06/2020 ÷ 20LA11320 del 18/06/2020"
- Annex 7 - Anti-Fouling System Certificate
- Annex 8 - HazMat Certificates
- Annex 9 - "Responsabile gestione presenza amianto" in strutture edifici e impianti, Registrato al n. 999 D.D. n. 5865
- Annex 10 - IHM Part II and III

3 DEFINITIONS AND ACRONYMS

Acronym	Description
PCB	Polychlorinated biphenyls
HCFC	Hydro chlorofluorocarbon
HKC	Honk Kong Convention
TBT	Tributyltin
PFOS	Perfluorooctane sulfonic acid
HBCDD	Brominated Flame Retardant
VSCP	Visual Sampling Check Plan

4 EUROPEAN REGULATION ON SHIP RECYCLING

4.1 INTRODUCTION

The objective of the Regulation, formally adopted on 22 October 2013 from the European Parliament on ship recycling, is to reduce the negative impacts linked to the recycling of EU- flagged ships, especially in South Asia, without creating unnecessary economic burdens.

The new Ship Recycling Regulation will apply to large commercial seagoing vessels flying the flag of the EU Member State, and to ships flying the flag of the third country calling at EU ports or anchorages.

According to the new rules, the installation or use of certain hazardous materials on ships will be prohibited or restricted. These hazardous materials include asbestos, ozone- depleting substances, PCBs, PFOS, and anti-fouling compounds and systems. Each new European ship (or a ship flying a flag of the third country calling at EU port or anchorage) will be required to have on board an inventory of hazardous materials verified by the relevant Administration or authority and specifying the location and approximate quantities of those materials.

European ship owners will have to ensure that ships are only recycled in ship recycling facilities included in the European List. They will also have to ensure that each end-of-life ship is prepared for recycling. To be included in the European list, ship recycling facilities will be required to operate in permanent structures, which must be designed, constructed and operated safely and respecting the environment. The recycling facilities should confine hazardous materials throughout the dismantling process and manipulate the same only on impermeable soils with an effective drainage system. The quantities of hazardous materials shall be documented and their treatment will be allowed only in specific authorized treatment facilities.

On 19 December 2016, the European Commission adopted the first version of the European List of ship recycling facilities. The first 18 shipyards included in the List are all located in the EU. They fulfil the strict requirements for inclusion in the List and as a result will have exclusive access to the recycling of ships flying the flags of Member States of the Union. The European Commission has also received applications from yards located in third countries. The applications are being thoroughly reviewed and site inspections will be conducted to check their credentials. The Commission decided in 2017 on their inclusion in the List.

The new EU Regulation (see Annex [3]) brings into force an early implementation of the requirements of the 2009 Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships (see Annex [1]), therefore contributing to its global entry into force.

4.2 OBJECTIVES OF THE INVENTORY OF HAZARDOUS MATERIALS

The objectives of the Inventory, to be developed in accordance to IMO resolution MEPC.269(68) (see Annex [2] "2015 Guidelines for the development of the Inventory of Hazardous Materials"), are to provide ship-specific information on the actual Hazardous Materials present on board, in order to protect health and safety and to prevent environmental pollution at Ship Recycling Facilities.

This information will be used also by the Ship Recycling Facilities in order to decide how to manage the types and amounts of materials identified in the Inventory.

4.3 SCOPE OF THE INVENTORY

The Inventory consists of the following Parts:

- ✓ Part I: Materials contained in ship structure or equipment:
 - Paints and coating systems containing hazardous materials;
 - Equipment and machinery containing hazardous materials;
 - Structure and hull containing hazardous materials.
- ✓ Part II: operationally generated waste.
- ✓ Part III: Stores:
 - Stores;
 - Liquids sealed in ship's machinery and equipment;
 - Gases sealed in ship's machinery and equipment;
 - Regular consumable goods potentially containing Hazardous Materials.

4.4 MATERIALS TO BE LISTED IN THE INVENTORY

Appendix 1 of the IMO Guidelines, "Items to be listed in the Inventory of Hazardous Materials", provides information on the Hazardous Materials that may be found on board a ship.

Materials set out in Appendix 1 should be listed in the Inventory. Each item in Appendix 1 of these Guidelines is classified under "Table A", "Table B", "Table C" or "Table D" according to its properties:

- ✓ Table A comprises the materials listed in appendix 1 of the Convention;
- ✓ Table B comprises the materials listed in appendix 2 of the Convention;
- ✓ Table C (Potentially hazardous items) comprises items which are potentially hazardous to the environment and human health at Ship Recycling Facilities; and
- ✓ Table D (Regular Consumable Goods potentially containing Hazardous Materials) comprises goods which are not integral to a ship and are unlikely to be dismantled or treated at a Ship Recycling Facility.

Table A and Table B correspond to Part I of the Inventory. Table C corresponds to Parts II and III, while Table D corresponds to Part III.

4.5 MATERIALS NOT REQUIRED TO BE LISTED IN THE INVENTORY

IMO Resolution MEPC.269(68) provides two different methodologies for the development of the Inventory:

- ✓ "new ship" methodology;
- ✓ "existing ship" methodology.

The "new ship" methodology includes the research and inclusion in the Inventory of the totality of the substances listed in Table A and Table B of Appendix 1, while the "existing ship" methodology requires only the research of the substances listed table A and, as far as practicable, the research and inclusion of the substances listed in table B.

The difference between the "new ship" and "existing ship" methodology is not only limited to the considered hazardous substances but also affects the way of collecting such information.

4.6 DEVELOPMENT OF PART I OF THE INVENTORY ("EXISTING SHIP" METHODOLOGY)

The development of Part I of the inventory of hazardous substances is a complex process requiring close collaboration between the persons in charge for its development, the owner/shipping company, the shipyard where the ship was built, the manufacturers of the equipment installed on board and last but not least the crew of the ship (if applicable).

The difficulty in obtaining the necessary information for the development of the inventory, the necessity to perform a detailed analysis of the available documentation, contact suppliers/subcontractors, schedule visits on board, take samples and have them analysed, may result in a very time consuming activity.

According to IMO Resolution MEPC.269(68), the development of Part I of the Inventory for an existing ship, has to include the following steps:

- ✓ Step 1: Collection of necessary information;
- ✓ Step 2: Assessment of collected information;
- ✓ Step 3: Preparation of visual/sampling check plan;
- ✓ Step 4: Onboard visual/sampling check; and
- ✓ Step 5: Preparation of Part I of the Inventory and related documentation.

4.6.1 Collection of necessary information

The persons in charge for the development of the Inventory should identify, research, request and procure all reasonably available documentation regarding the ship.

Information that will be useful includes maintenance, conversion, and repair documents; certificates, manuals, ship's plans, drawings, and technical specifications; product information data sheets (such as Material Declarations); and hazardous material inventories or recycling information from sister ships.

Potential sources of information could include previous shipowners, the ship builder, historical societies, classification society records, and ship recycling facilities with experience working with similar ships

It is impossible to check all equipment, systems, and/or areas on board the ship to determine the presence or absence of Hazardous Materials. The total number of parts on board may exceed several thousand.

In order to take a practical approach, an "Indicative list" should be prepared that identifies the equipment, system, and/or area on board that is presumed to contain Hazardous Materials. Field interviews with the shipyard and suppliers may be necessary to prepare such lists.

IMO Resolution MEPC.269(68) provides, for every hazardous material listed in Table A and B, an "indicative list" of systems, equipment and structure potentially containing such substances.

4.6.2 Assessment of collected information

The information collected in the step above should be assessed. The assessment should cover all materials listed in Table A; materials listed in Table B should be listed as far as practicable. The results of the assessment should be reflected in the visual/sampling check plan.

Preparation of a checklist is an efficient method for developing the Inventory for existing ships in order to clarify the results of each step.

Based on collected information including the "Indicative list" mentioned above, all equipment, systems, and/or areas onboard assumed as containing, not containing or potentially containing Hazardous Materials listed in Tables A and B should be included in the checklist.

Each listed equipment, system, and/or area should be then analyzed and assessed onboard for evaluating its effective Hazardous Materials content.

4.6.3 Preparation of visual/sampling check plan

Each item classified as "Containing" or "Not containing" hazardous materials should be subjected to a visual check on board.

For each item categorized as "unknown", a decision should be made as to whether to apply a sampling check. However, any item categorized as "unknown" may be classed as "potentially containing Hazardous Material" provided comprehensive justification is given, or if it can be assumed that there will be little or no effect on disassembly as a unit and later ship recycling and disposal operations.

A "visual/sampling check plan" should be prepared on the basis of the above mentioned decisions.

In the VSCP are listed:

- Samples collected on board
- Machinery and equipment Visual Checks

All Documentary Checks are listed in the "Collection of necessary information" (ANNEX 5).

4.6.4 Onboard visual/sampling check

The visual/sampling check should be conducted according to the plan. Check points should be marked in the ship's plan or recorded with photographs.

A person taking samples should be protected by the appropriate safety equipment relevant to the suspected type of hazardous materials encountered. The personnel taking samples should ensure compliance with relevant national regulations.

The results of visual/sampling checks should be recorded in the checklist. Any equipment, systems and/or areas of the ship that cannot be accessed for checks should be classified as "potentially containing Hazardous Material" - PCHM.

4.6.5 Development of Part I of the Inventory

The results of the check and the estimated quantity of Hazardous Materials should be recorded on the checklist. Part I of the Inventory should be developed with reference to the checklist.

5 PART I - HAZARDOUS MATERIALS CONTAINED IN THE SHIP'S STRUCTURE AND EQUIPMENT

5.1 ITEMS TO BE LISTED IN THE INVENTORY

Table A - Materials listed in Appendix 1 of the Annex to the HKC

No.	Materials		Inventory			Threshold value
			Part I	Part II	Part III	
A-1	Asbestos		x			0.1% ⁴
A-2	Polychlorinated biphenyls (PCBs)		x			50 mg/kg ⁵
A-3	Ozone depleting substances	CFCs	x			no threshold value ⁶
		Halons	x			
		Other fully halogenated CFCs	x			
		Carbon tetrachloride	x			
		1,1,1-Trichloroethane (Methyl chloroform)	x			
		Hydrochlorofluorocarbons	x			
		Hydrobromofluorocarbons	x			
		Methyl bromide	x			
		Bromochloromethane	x			
A-4	Anti-fouling systems containing organotin compounds as a biocide		x			2,500 mg total tin/kg ⁷

Table B - Materials listed in Appendix 2 of the Annex to the HKC

No.	Materials		Inventory			Threshold value
			Part I	Part II	Part III	
B-1	Cadmium and cadmium compounds		x			100 mg/kg ⁸
B-2	Hexavalent chromium and hexavalent chromium compounds		x			1,000 mg/kg ⁸
B-3	Lead and lead compounds		x			1,000 mg/kg ⁸
B-4	Mercury and mercury compounds		x			1,000 mg/kg ⁸
B-5	Polybrominated biphenyl (PBBs)		x			50 mg/kg ⁹
B-6	Polybrominated diphenyl ethers (PBDEs)		x			1,000 mg/kg ⁸
B-7	Polychlorinated naphthalenes (more than 3 chlorine atoms)		x			50mg/kg ¹⁰
B-8	Radioactive substances		x			no threshold value ¹¹
B-9	Certain shortchain chlorinated paraffins (Alkanes, C10-C13, chloro)		x			1% ¹²

5.2 REMARKS AND LIMITATIONS

In applying the methodology described in the previous sections to the case of the MV EUROFERRY OLYMPIA, all the prescribed steps for the development of Part I of the inventory have been followed, starting from the analysis of the available documentation to the on board visual and sampling check (carried out by SIGE MARINE).

With reference to the documents review, useful information has been found in certificates and reports related to construction.

This document contains an estimation of the hazardous materials quantity present onboard at the time of the visual and sampling inspection, on the basis of the documents review previously described.

Considering the difficulty to pick up the samples in a new ship in the no destructive way and data on board of potentially dangerous substances, the information contained herein represents the best that can be done at the evidence available.

5.3 I-1 PAINTS AND COATING SYSTEMS CONTAINING MATERIALS LISTED IN TABLE A AND TABLE B OF APPENDIX 1 OF THE GUIDELINES

As stated in the International Anti-fouling System Certificate (see Annex [7]), the anti-fouling system on the ship complies with the applicable requirements of Annex 1 to the Convention.

Therefore the presence of organotin compounds in the anti-fouling system can be excluded (see Record of Anti-fouling System: TBT free anti-fouling system).

No.	Application of paint	Name of paint	Location	Materials (classification in Appendix 1)	Approx. quantity	Remarks
1	--	--	--	--	--	--
2	--	--	--	--	--	--
3	--	--	--	--	--	--

5.4 I-2 EQUIPMENT AND MACHINERY CONTAINING MATERIALS LISTED IN TABLE A AND TABLE B OF APPENDIX 1 OF THE GUIDELINES

In the following table the presence of hazardous materials contained in equipment and machinery are reported.

The asbestos evaluation for equipment and machinery is based on the year of construction and on the documents collected onboard.

In the document "MV EUROFERRY OLYMPIA - Survey Report Hazardous Materials Investigation" (see Annex [5]), are listed the sampled components that can be considered potentially containing asbestos and their analytical results are reported in the "Survey Report".

The results of the laboratory analyses attest the absence of asbestos in all the sample taken.

The presence of Polychlorinated biphenyl (PCBs) in materials has been evaluated by means of samples analysis carried out by SIGE MARINE in the documents "MV EUROFERRY OLYMPIA - Survey Report Hazardous Materials Investigation" and Laboratory test reports – "Rapporto di prova n° 20LA11261 del 18/06/2020 ÷ 20LA11320 del 18/06/2020" (see Annex [5] and Annex [6]).

The results of the laboratory tests exclude the presence of PCBs.

The refrigerating/air – conditioning on board are listed in the document "MV EUROFERRY OLYMPIA - Survey Report Hazardous Materials Investigation" (see Annex [5]). There are no ozone depleting substances in the onboard systems.

No.	Name of equipment and machinery	Location	Materials (classification in Appendix 1)	Parts where used	Approx. quantity	Remarks
1	--	--	--	--	--	--
2	--	--	--	--	--	--
3	--	--	--	--	--	--

5.5 STRUCTURE AND HULL CONTAINING MATERIALS LISTED IN TABLE A AND TABLE B OF APPENDIX 1 OF THE GUIDELINES

In the following table the presence of hazardous materials contained in structure and hull are reported.

The asbestos evaluation is based on the construction documents and the onboard visual and sampling check carried out by SIGE MARINE in April 2020 (document "MV EUROFERRY OLYMPIA - Survey Report Hazardous Materials Investigation" reported in Annex [5]): no presence of asbestos have been detected in structure and hull of the ship.

The Hazardous Material is founded only in the Lead containing batteries.

No.	Name of structural element	Location	Materials (classification in Appendix 1 of the Annex of the HKC)	Parts where used	Approx. quantity	Remarks
1	--	--	--	--	--	--
2	--	--	--	--	--	--
3	--	--	--	--	--	--

No.	Name of structural element	Location	Materials (classification in Appendix 2 of the Annex of the HKC)	Parts where used	Approx. quantity	Remarks
76	COMMON USE Battery	5th Deck – Battery Room	Lead		8 Batteries	
77	GMDSS Batteries	9th Deck - Navigation Room	Lead		2 Batteries	
78	Emergency Generator Batteries	Platform 3/4 - Emergency Generator Room	Lead		2 Batteries	

5.6 CONTROLS OF HAZARDOUS MATERIALS LISTED IN THE ANNEX I AND IN THE ANNEX II OF THE REGULATION (EU) NO 1257/2013

The Regulation (EU) No 1257/2013 of the European Parliament and of the Council of 20 November 2013 on ship recycling and amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC", L 330/1, lists in the ANNEX I and the ANNEX II: PFOS (ANNEX I) and HBCDD (ANNEX II)

In the following table the presence of hazardous materials contained in the ship. The PFOS and HBCDD evaluation is based on the construction documents and the onboard visual and sampling check carried out by SIGE MARINE in April 2020 (document "MV EUROFERRY OLYMPIA - Survey Report Hazardous Materials Investigation" reported in Annex [5]): no presence of PFOS and HBCDD have been detected in the ship.

PFOS Samples are submitted to the presence on board of items potentially containing PFOS material.

The sampling of the materials that could potentially contain PFOS wasn't deemed necessary, since no item that could potentially contain PFOS has emerged from the study of the technical documentation and from the survey aboard.

No.	Name of element	Location	Materials	Parts where used	Approx. quantity	Remarks
1	--	--	--	--	--	--
2	--	--	--	--	--	--
3	--	--	--	--	--	--

6 PART II – OPERATIONALLY GENERATED WASTE

The amount of cargo residues, fuel oil and wastes remaining onboard and intended for delivery with the ship to a Ship Recycling Facility had been assessed at the completion of debunkering; herebelow the present condition is reported, on the basis of the information collected on board.

No.	Location	Name of item (classification in appendix 1) and detail (if any) of the item	Approx. Quantity in m ³	Remarks
1	WT 8 STB	Very Low Sulphur Fuel Oil	2,7	UNPUMPABLE
2	WT 8 PORT	Very Low Sulphur Fuel Oil	3,3	UNPUMPABLE
3	WT 9 STB	Very Low Sulphur Fuel Oil	4,3	UNPUMPABLE
4	WT 9 PORT	Very Low Sulphur Fuel Oil	4,0	UNPUMPABLE
5	WT 10 STB	Very Low Sulphur Fuel Oil	2,9	UNPUMPABLE
6	WT 10 PORT	Very Low Sulphur Fuel Oil	6,5	UNPUMPABLE
7	WT 11 STB	Very Low Sulphur Fuel Oil	3,3	UNPUMPABLE
8	WT 11 PORT	Very Low Sulphur Fuel Oil	5,7	UNPUMPABLE
9	T 12 STB	Very Low Sulphur Fuel Oil	1,7	Service Tank MMPP UNPUMPABLE
10	T 13 STB	Very Low Sulphur Fuel Oil	3,0	Settling Tank MMPP UNPUMPABLE
11	T 13 PORT	Very Low Sulphur Fuel Oil	3,0	Settling Tank MMPP UNPUMPABLE
12a	T 35 STB	Very Low Sulphur Fuel Oil	0,5	Service Tank MMPP UNPUMPABLE
12b	T 14 A	Very Low Sulphur Fuel Oil	4,1	Overflow UNPUMPABLE
13	T 12 PORT	Marine Gasoil Sulphur 0,01%	0,1	Service Tk MMPP/Boiler
14	T 21	Marine Gasoil Sulphur 0,01%	1,0	
15	T 22	Marine Gasoil Sulphur 0,01%	1,2	
16	T 36	Marine Gasoil Sulphur 0,01%	0,0	Service Tank DDGG
17	T 38	Marine Gasoil Sulphur 0,01%	0,1	Service Tank DGE
18	T 15 PORT	Lube oil	0,3	
19	T 15 STB	Lube oil	0,9	
20	T 32	Lube oil	0,1	
21	T 33	Lube oil	0,1	
22	T 34	Lube oil	0,1	
23	T 37 PORT	Lube oil	0,1	
24	T 37 STB	Lube oil	0,1	
25	T 40	Lube oil	0,1	

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No.	Location	Name of item (classification in appendix 1) and detail (if any) of the item	Approx. quantity in m ³	Remarks
26	T 2 A	Sewage	1,9	
27	T 10 A	Sewage	2,1	
28	T 14 PORT	Grey Water	24,0	
29	T 14 STB	Grey Water	7,8	
30	T 16 A PORT	ME Lube Oil Drain	2,1	
31	T 16 A STB	ME Lube Oil Drain	2,5	
32	T 16 B PORT	ME Lube Oil Drain	2,5	
33	T 16 B STB	ME Lube Oil Drain	2,5	
34	T 17	Leakage Oil	0,7	
35	T 18	Cooling Water	11,0	
36	T 19	Waste Oil	0,4	
37	T 20 STB	Bilge Water	3,0	
38	T 28 PORT	LO Sep.Sludge	0,1	
39	T 28 STB	LO Sep.Sludge	0,1	
40	T 29	VLSFO Sep.Sludge	0,1	
41	T 30	Sludge	0,1	
42	T 31	Clean Bilge	1,1	
43	T 20 PORT	Boiler Water	35	
44	T 27 PORT	Fresh Water	105,7	
45	T 27 STB	Fresh Water	99,7	
46	FOREPEAK	Ballast Water	173,7	
47	T 2 PORT	Ballast Water	170,0	
48	T 2 STB	Ballast Water	53,5	
49	T 3	Ballast Water	1017,2	
50	T 4 PORT	Ballast Water	1,0	
51	T 4 STB	Ballast Water	32,3	
52	T 5 PORT	Ballast Water	445,8	
53	T 5 STB	Ballast Water	435,3	
54	T 6 PORT	Ballast Water	367,8	
55	T 6 STB	Ballast Water	317,2	

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No.	Location	Name of item (classification in appendix 1) and detail (if any) of the item	Approx. quantity in m ³	Remarks
56	T 7 PORT	Ballast Water	245,6	
57	T 7 STB	Ballast Water	247,8	
58	T 8 PORT	Ballast Water	283,6	
59	T 8 STB	Ballast Water	283,2	
60	T 9 PORT	Ballast Water	298,9	
61	T 9 STB	Ballast Water	298,9	
62	T 10 PORT	Ballast Water	267,0	
63	T 10 STB	Ballast Water	256,0	
64	T 11	Ballast Water	0,0	
65	T 25 PORT	Ballast Water	17,4	
66	T 25 STB	Ballast Water	269,5	
67	T 23 PORT	Void	0,0	
68	T 23 STB	Void	0,0	
69	WT 16 A	Stabilizing Water	224,0	
70	WT 16 B	Stabilizing Water	244,4	
71	WT 17 PORT	Stabilizing Water	48,7	
72	WT 17 STB	Stabilizing Water	96,6	
73	2° COPERTINO (DG2)	Bilge well	0,2	
74	2° COPERTINO (DG1)	Bilge well	0,2	
75	1° COPERTINO (MMEE)	Bilge	1	
76	2° Deck Bunker station STB	Bilge well	0,3	

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7 PART III – STORES

7.1 III-1 - STORES

The stores have been evaluated on the basis of the information collected during the attendances on board. Specific information about fire extinguishers and firefighting equipment has been provided by the Company and reported in the Fire Control Plan. This data has been integrated by a visual inspection onboard.

No.	Location	Name of item (classification in appendix 1)	Unit quantity	Figure	Approx quantity	Remarks
1	Fast rescue boat	Battery	0 pieces			removed
2	Rescue boat	Battery	0 pieces			removed
3	Em. diesel generator room	Battery	2 pieces			burned
4	Bridge-wheelhouse	Battery ups	42 pieces			burned
5	Battery room	Battery	0 pieces			removed
6	Various locations on board	powder ext.	---			
7		Trolleys powder ext.	1 pieces			ER Boiler
8		CO2 extinguishers	2 pieces			ECR
9	Deck 3	Acetylene bottles	---			removed
10	Deck 3	Oxygen bottles	---			removed
11	Paint store	Paint and paint related products (Catalyzers)			400 LT	burned
		Paint and paint related products (Catalyzers)			3000 LT	burned
	Paint store (Container Deck 3)	Paint and paint related products			0 LT	removed
12	GARAGE 2	Cargo/Fire residues (dust and lime)			15 m ³	
	Chemical store corridor	Fire residues mixed with oils			0 m ³	removed
	GARAGE 3	Cargo/Fire residues (dust and lime)			0 m ³	removed
	DECK 4	Cargo/Fire residues (dust and lime)			0 m ³	removed

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	DECK 5	Cargo/Fire residues (dust and lime)			45 m ³	
	DECK 6	Cargo/Fire residues (dust and lime)			40 m ³	
	DECK 7	Cargo/Fire residues (dust and lime)			40 m ³	
13	Deck 1	Fire Detectors (Consilium)	41 pieces			All include
14	Engine room	Fire Detectors (Consilium)	86 pieces			All include
15	Deck 1	Garbage/rags in drums				Nil
16	Engine Room Purifier Room	Chemical cleaner	---			
17	Fuel tanks	Residues	44,9 m ³			UNPUMPABLE
18	Lube oil tanks	Residues	2,1 m ³			UNPUMPABLE
19	Sludge/sewage tanks	Residues	8,5 m ³			UNPUMPABLE
20	Accommodation area	Wash basin & WC				Not accessible
21	Deck 1	Fire Fighting Equipment	---			
22	CO2	CO2 Ship Main Bottle	1 piece			empty
		CO2 Paint Room cylinder	1 piece			
		CO2 DGE cylinder	1 piece			
23	Chemical store	Chemical and chemical related products			1850 LT	
24	Deck 3	HFC gas R448			459 KG	

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7.2 III-2 - LIQUIDS SEALED IN SHIP'S MACHINERY AND EQUIPMENT

The liquids sealed in ship's machinery and equipment has been assessed on the basis of the documentary material provided by the owner and the information collected on board.

No.	Type of liquids (classification in appendix 1)	Name of machinery or equipment	Location	Approx. quantity in m ³	Remarks
1	Lubricating Oil	Diesel generators	Engine room	0,1	
		Alternator bearings	Engine room	0,04	
		Anchor winches	Forecastle room	0,1	
		Lifeboat winches	Deck 5	0,05	
		Main engines	Engine room	0,1	
		Engine / Pump reduction gearbox	Storage room	0,1	
		Rec. gearbox	Engine room	0,1	
		Compressors	Storage oil	0,1	
		Rescue boats engines	Storage oil	0,01	
2	Hydraulic oil	Steering gears	Steering room	0,6	
		Bow thrusters	Bow thruster room (1 – 2)	0,3	
		Hydraulic system	Plt 2/3 Aft stb	0,1	
		drums fresh oil	Deck 3	0	burned
		Stern Thruster (3 – 4)	Steering gear room	0,4	

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7.3 III-3 – GASES SEALED IN SHIP'S MACHINERY AND EQUIPMENT

The gases sealed in ship's machinery and equipment has been assessed on the basis of the documentary material provided by the owner and the information collected on board. The approximate quantity of the gases contained in the equipment listed has been estimated.

No.	Type of gases (classification in appendix 1)	Name of machinery or equipment	Location	Approx quantity	Remarks
1	HFC (Type of freon)	Cooling system	Provision room	0	burned
2	HFC (Type of freon)	Various cooling system on board	Air conditioning room	0	burned
3	HFC (R448)	ECR A/C system	DG 1 room	5 KG	
4	HFC (R448)	ECR A/C system	DG 2 room	5 KG	

7.4 III-4 – REGULAR CONSUMABLE GOODS POTENTIALLY CONTAINING HAZARDOUS MATERIALS

No.	Location	Name of item	Quantity	Remarks
1	Bridge	All item	---	burned
2	Accommodation	All item	---	burned
3	Bridge	UPS	---	burned
4	Emergency Diesel Generator Room	battery	---	burned
5	Engine Control Room	UPS	1	
6	Various location	Multi-alarm speakers	---	burned
40	Bridge/ECR/CCR	Internal telephone system	---	burned

If any other material is removed or added, this document is no longer valid.

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