SAFETY DATA SHEET



XPR SAE 5W-30

Section 1. Identification

GHS product identifier : ▼PR SAE 5W-30

Product code : 300864175017

Other means of : Not available.

identification

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

| Identified uses | |
|--|--------|
| onsumer products: Lubricating Oil Industrial applications: Lubricating Oil | |
| Uses advised against | Reason |
| None known. | |

Supplier's details : Calumet Branded Products, LLC

2780 Waterfront Pkwy E. Drive Suite 200

Indianapolis, IN 46214

USA

Technical Services:317-328-5660

24hr. CHEMTREC 1-800-424-9300 /

International 1-703-527-3887

: 24 hr. CHEMTREC 1-800-424-9300 / International 1-703-527-3887

Section 2. Hazards identification

OSHA/HCS status

: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture

: Not classified.

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 4.3%

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 51.3%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 52.5%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2.8%

GHS label elements

Signal word : No signal word.

Hazard statements: No known significant effects or critical hazards.

Precautionary statements

General: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Mot applicable.

Response : Mot applicable.

Storage : Not applicable.

Disposal : Mot applicable.

Date of issue/Date of revision : 01/03/2020 Version : 5 1/11

Section 2. Hazards identification

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture
Other means of
identification

: Mixture : Not available.

| Ingredient name | % | CAS number |
|---|-----------|-------------|
| v ec-1-ene, trimers, hydrogenated | ≥25 - ≤49 | 68037-01-4 |
| Distillates (petroleum), hydrotreated heavy paraffinic | ≤11 | 64742-54-7 |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | ≤3 | 72623-87-1 |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, | ≤1.2 | 84605-29-8 |
| zinc salts | | |
| Gas oils (petroleum), hydrodesulfurized | ≤1.3 | 64742-79-6 |
| Phenol, dodecyl-, branched | ≤0.1 | 121158-58-5 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion

: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Date of issue/Date of revision : 01/03/2020 Version : 5 2/11

Section 4. First aid measures

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: Do not use water jet.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon dioxide

carbon monoxide nitrogen oxides sulfur oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Date of issue/Date of revision : 01/03/2020 3/11 Version: 5

Section 7. Handling and storage

Precautions for safe handling

Protective measures Advice on general occupational hygiene

- Put on appropriate personal protective equipment (see Section 8).
- : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|--|---------------------------------------|
| pec-1-ene, trimers, hydrogenated | None. |
| Distillates (petroleum), hydrotreated heavy paraffinic | ACGIH TLV (United States, 3/2019). |
| | TWA: 5 mg/m³ 8 hours. Form: Inhalable |
| | fraction |
| | OSHA PEL (United States, 5/2018). |
| | TWA: 5 mg/m ³ 8 hours. |
| | NIOSH REL (United States, 10/2016). |
| | TWA: 5 mg/m³ 10 hours. Form: Mist |
| | STEL: 10 mg/m³ 15 minutes. Form: Mist |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | NIOSH REL (United States, 10/2016). |
| | TWA: 5 mg/m³ 10 hours. Form: Mist |
| | STEL: 10 mg/m³ 15 minutes. Form: Mist |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) | None. |
| esters, zinc salts | |
| Gas oils (petroleum), hydrodesulfurized | None. |
| Phenol, dodecyl-, branched | None. |

Appropriate engineering controls

Environmental exposure controls

- : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

Skin protection

Date of issue/Date of revision : 01/03/2020 Version:5

Section 8. Exposure controls/personal protection

Hand protection : ☑hemical-resistant, impervious gloves complying with an approved standard should be

worn at all times when handling chemical products if a risk assessment indicates this is

necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before

handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the

appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important

aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Purple.

Odor : Characteristic.
Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : Not available.

Flash point : Open cup: 196°C (384.8°F) [Cleveland.]

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive : Not available.

(flammable) limits

Vapor pressure: Not available.Vapor density: Not available.

Relative density : 0.8711

Solubility : Insoluble in the following materials: cold water and hot water.

Solubility in water : Not available.

Partition coefficient: n- : Not available.

octanol/water

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Kinematic (40°C (104°F)): 0.613 cm²/s (61.3 cSt)

Flow time (ISO 2431) : Not available.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Date of issue/Date of revision : 01/03/2020 Version : 5 5/11

Section 10. Stability and reactivity

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|---------------------------------|---------|-------------|----------|
| Dec-1-ene, trimers, hydrogenated | LD50 Oral | Rat | >2000 mg/kg | - |
| Distillates (petroleum), hydrotreated heavy paraffinic | LC50 Inhalation Dusts and mists | Rat | 5.7 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | 3.2 g/kg | - |
| Gas oils (petroleum), hydrodesulfurized | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|--|------------------------|---------|-------|----------|-------------|
| Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts | Skin - Irritant | Rat | - | - | - |
| | Eyes - Severe irritant | Rabbit | - | - | - |

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

| Name | Result |
|--|--|
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 |

Section 11. Toxicological information

Information on the likely routes of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Mo specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 Mutagenicity
 No known significant effects or critical hazards.
 Teratogenicity
 No known significant effects or critical hazards.
 Developmental effects
 No known significant effects or critical hazards.
 Fertility effects
 No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/ I) |
|---|------------------|-------------------|--------------------------------|----------------------------------|---|
| ₹PR SAE 5W-30 | 5215.7 | 5635.7 | N/A | N/A | 59.4 |
| Dec-1-ene, trimers, hydrogenated | 2500 | N/A | N/A | N/A | N/A |
| Distillates (petroleum), hydrotreated heavy paraffinic | N/A | 2500 | N/A | N/A | 5.7 |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | N/A | 2500 | N/A | N/A | N/A |
| Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts | 3200 | 2500 | N/A | N/A | N/A |
| Gas oils (petroleum), hydrodesulfurized | N/A | 2500 | N/A | N/A | 1.5 |

Date of issue/Date of revision : 01/03/2020 Version : 5 7/11

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|---------------------------|---------|----------|
| vistillates (petroleum), hydrotreated heavy paraffinic | Acute EC50 >100 mg/l | Daphnia | 48 hours |
| | Acute IC50 >100 mg/l | Algae | 72 hours |
| | Acute LC50 >100 mg/l | Fish | 96 hours |
| Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts | Acute LC50 10 to 100 mg/l | Fish | 96 hours |
| , | Acute NOEC 1.8 mg/l | Fish | 4 days |
| | Chronic NOEC <1 mg/l | Daphnia | 21 days |
| Phenol, dodecyl-, branched | EC50 0.037 mg/l | Daphnia | 2 days |
| | LC50 40 mg/l | Fish | 4 days |
| | NOEC 0.0037 mg/l | Daphnia | 21 days |

Persistence and degradability

| Product/ingredient name | Test | Result | | Dose | Inoculum |
|--|--|--------------------------------------|------------|----------|------------------|
| Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts | - | 1.5 % - Not readily - | 28 days | - | - |
| | OECD 301B Ready Biodegradability - CO ₂ Evolution Test | 1.5 % - 28 days | | - | - |
| Phenol, dodecyl-, branched | - OECD 301B Ready Biodegradability - CO ₂ Evolution Test | 56 % - Not readily - 125 % - 28 days | 10 days | - | - |
| Product/ingredient name | Aquatic half-life | | Photolysis | <u> </u> | Biodegradability |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--------------------------------|-------------------|------------|------------------|
| Dec-1-ene, trimers, | - | - | Not readily |
| hydrogenated | | | |
| Distillates (petroleum), | - | - | Not readily |
| hydrotreated heavy paraffinic | | | |
| Phosphorodithioic acid, | - | - | Not readily |
| mixed O,O-bis | | | |
| (1,3-dimethylbutyl and iso-Pr) | | | |
| esters, zinc salts | | | |
| Phenol, dodecyl-, branched | - | - | Not readily |

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|--|--------|------|-----------|
| Dec-1-ene, trimers, hydrogenated | >6.5 | - | high |
| Distillates (petroleum), hydrotreated heavy paraffinic | >6 | - | high |
| Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr) | 0.56 | - | low |
| esters, zinc salts Phenol, dodecyl-, branched | 6.1 | 1601 | high |

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | DOT Classification | TDG Classification | IMDG | IATA |
|-----------|--------------------|--------------------|----------------|----------------|
| UN number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| | | | | |

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according: Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations

: TSCA 8(a) PAIR: diphenylamine; naphthalene

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

√lean Water Act (CWA) 307: zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis (phosphorodithioate); Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-

Pr) esters, zinc salts

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)** : Not listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

: Not listed

Class II Substances **DEA List I Chemicals**

: Not listed

(Precursor Chemicals)

: Not listed

DEA List II Chemicals (Essential Chemicals)

SARA 302/304

Composition/information on ingredients

Date of issue/Date of revision : 01/03/2020 9/11 Version: 5

Section 15. Regulatory information

| | | | SARA 302 TPQ | | SARA 304 RQ | |
|----------------|------|------|--------------|-----------|-------------|-----------|
| Name | % | EHS | (lbs) | (gallons) | (lbs) | (gallons) |
| ethylene oxide | <0.1 | Yes. | 1000 | - | 10 | - |

SARA 304 RQ : 7267441860.5 lbs / 3299418604.7 kg [1000590268.9 gal / 3787646199.8 L]

SARA 311/312

Classification : Mot applicable.

Composition/information on ingredients

| Name | % | Classification |
|---|-----------|---|
| of the state of t | ≥25 - ≤49 | ASPIRATION HAZARD - Category 1 |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil- based | ≤3 | ASPIRATION HAZARD - Category 1 |
| Phosphorodithioic acid, mixed O, O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts | ≤1.2 | SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 |
| Gas oils (petroleum), hydrodesulfurized | ≤1.3 | FLAMMABLE LIQUIDS - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 ASPIRATION HAZARD - Category 1 |

SARA 313

| | Product name | CAS number | % |
|---------------------------------|---|------------|------|
| Form R - Reporting requirements | Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts | 84605-29-8 | ≤1.2 |
| Supplier notification | Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts | 84605-29-8 | ≤1.2 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: OIL MIST, MINERAL; OIL MIST, MINERAL

New York : None of the components are listed.

New Jersey : The following components are listed: ZINC compounds; MINERAL OIL (UNTREATED

and MILDLY TREATED)

Pennsylvania : The following components are listed: ZINC COMPOUNDS

California Prop. 65

This product is not known to contain California Prop 65 substances ≥1 ppm

International lists

National inventory

Australia : Not determined.

Canada : All components are listed or exempted.

China : Not determined.

Europe : At least one component is not listed in EINECS but all such components are listed in

ELINCS. Please contact your supplier for information on the inventory status of this

material.

Japan : Japan inventory (ENCS): Not determined.

Japan inventory (ISHL): Not determined.

New Zealand : Not determined.
Philippines : Not determined.
Republic of Korea : Not determined.
Taiwan : Not determined.
Thailand : Not determined.

Date of issue/Date of revision : 01/03/2020 Version : 5 10/11

XPR SAE 5W-30

Section 15. Regulatory information

: Not determined.

United States : All components are listed or exempted.

Viet Nam : Not determined.

Section 16. Other information

Procedure used to derive the classification

| Classification | Justification |
|-----------------|---------------|
| Not classified. | |

History

Date of issue/Date of

revision

: 01/03/2020

Version

5

Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group

UN = United Nations

▼ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Date of issue/Date of revision 11/11 : 01/03/2020 Version:5