SAFETY DATA SHEET

## Section 1. Identification

| GHS product identifier | SPO-222; SPO-233; SPO-244; SPO-255; SPO-266; SPO-MG |
| :---: | :---: |
| Other means of identification | Not available. |
| Product type | Liquid. |
| Relevant identified uses of the substance or mixture and uses advised against |  |
| Product use | Petroleum lubricating oil |
| Area of application | Industrial applications. |
| Supplier/Manufacturer | LUBRIPLATE® Lubricants Co. <br> 129 Lockwood St. <br> Newark, NJ 07105 <br> Telephone no.: 1-973-589-9150 |
| e-mail address of person responsible for this SDS | SDS@lubriplate.com |
| Emergency telephone number (with hours of operation) | CHEM-TEL 1-800-255-3924 (24 hour) |

## Section 2. Hazards identification

OSHA/HCS status
Classification of the substance or mixture
: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
: H319 EYE IRRITATION - Category 2A
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: $100 \%$
GHS label elements Hazard pictograms
: Warning
: H319-Causes serious eye irritation.
Precautionary statements
Prevention
Response

Storage
: P280 - Wear eye or face protection. P264 - Wash hands thoroughly after handling.
: P305 + P351 + P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313- If eye irritation persists: Get medical attention.
: Not applicable.

## Section 2. Hazards identification

## Disposal <br> Supplemental label elements <br> Hazards not otherwise classified

: Not applicable.
: Avoid contact with skin and clothing. Wash thoroughly after handling.
: Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

## Substance/mixture

Other means of
identification
: Mixture
: Not available.

## CAS number/other identifiers

| CAS number | $:$ Not applicable. |
| :--- | :--- |
| Product code | : Not available. |


| Ingredient name | Other names | $\%$ | CAS number |
| :--- | :--- | :--- | :--- |
| Residual oils (petroleum), solvent-dewaxed | - | $\geq 90$ | $64742-62-7$ |
| Distillates (petroleum), hydrotreated light | - | $\geq 90$ | $64742-55-8$ |
| paraffinic | - | $\geq 90$ | $64742-54-7$ |
| Distillates (petroleum), hydrotreated heavy | - | $\geq 1-<3$ | $68649-42-3$ |
| paraffinic | Phosphorodithioic acid, O,O-di-C1-14-alkyl | - | $\geq 1-<3$ |

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 and hence require reporting in this section.

## 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. Continue to rinse for at least 10 minutes. Get medical attention. |
| :---: | :---: |
| Inhalation | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Skin contact | : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| Ingestion | : Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. |


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| :--- | :--- | :--- | :--- |

## Section 4. First aid measures

Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

| Most important symptoms/effects, acute and delayed |  |
| :---: | :---: |
| Potential acute health effects |  |
| Eye contact | Causes serious eye irritation. |
| Inhalation | No known significant effects or critical hazards. |
| Skin contact | Defatting to the skin. May cause skin dryness and irritation. |
| Ingestion | No known significant effects or critical hazards. |
| Over-exposure signs/symptoms |  |
| Eye contact | Adverse symptoms may include the following: pain or irritation watering redness |
| Inhalation | No specific data. |
| Skin contact | : Adverse symptoms may include the following: irritation dryness cracking |
| Ingestion | : No specific data. |

Indication of immediate medical attention and special treatment needed, if necessary
Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments : No specific treatment.
Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

## See toxicological information (Section 11)

## Section 5. Fire-fighting measures

## Extinguishing media

Suitable extinguishing media
Unsuitable extinguishing media

Specific hazards arising from the chemical Hazardous thermal decomposition products

Special protective actions for fire-fighters
: Use an extinguishing agent suitable for the surrounding fire.
: Do not use water jet.
: In a fire or if heated, a pressure increase will occur and the container may burst.
: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides phosphorus oxides metal oxide/oxides
: 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.

## Section 5. Fire-fighting measures

| Special protective <br> equipment for fire-fighters | : Fire-fighters should wear appropriate protective equipment and self-contained breathing <br> 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 | $:$No action shall be taken involving any personal risk or without suitable training. <br> personnel <br>  <br> Evacuate surrounding areas. Keep unnecessary and unprotected personnel from <br>  <br>  <br> entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. |
| :--- | :--- |
|  | Provide adequate ventilation. Wear appropriate respirator when ventilation is <br> inadequate. Put on appropriate personal protective equipment. |
| For emergency responders :If specialised clothing is required to deal with the spillage, take note of any information <br> in Section 8 on suitable and unsuitable materials. See also the information in "For non- <br> emergency 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

Large 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.
: Stop leak if without risk. Move containers from spill area. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
: 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.

Conditions for safe storage, : Store in accordance with local regulations. Store in original container protected from including any
incompatibilities
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.

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| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Section 8. Exposure controls/personal protection

## Control parameters

## Occupational exposure limits

| Ingredient name | Exposure limits |
| :--- | :--- |
| Residual oils (petroleum), solvent-dewaxed | ACGIH TLV (United States, 3/2015). |
|  | TWA: $5 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. Form: Inhalable |
|  | fraction |
|  | NIOSH REL (United States, 10/2013). |
|  | TWA: $5 \mathrm{mg} / \mathrm{m}^{3} 10$ hours. Form: Mist |
|  | STEL: $10 \mathrm{mg} / \mathrm{m}^{3} 15 \mathrm{minutes}. \mathrm{Form:} \mathrm{Mist}$ |
| Distillates (petroleum), hydrotreated light paraffinic | OSHA PEL (United States, 2/2013). |
|  | TWA: $5 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. |
|  | ACGIH TLV (United States, 3/2015). |
|  | TWA: $5 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. Form: Inhalable |
|  | fraction |
|  | NIOSH REL (United States, 10/2013). |
|  | TWA: $5 \mathrm{mg} / \mathrm{m}^{3} 10$ hours. Form: Mist |
|  | STEL: $10 \mathrm{mg} / \mathrm{m}^{3} 15$ minutes. Form: Mist |
|  | OSHA PEL (United States, 2/2013). |
|  | TWA: $5 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. |
|  | ACGIH TLV (United States, 3/2015). |
|  | TWA: $5 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. Form: Inhalable |
|  | fraction |
|  | NIOSH REL (United States, 10/2013). |
|  | TWA: $5 \mathrm{mg} / \mathrm{m}^{3} 10$ hours. Form: Mist |
|  | STEL: $10 \mathrm{mg} / \mathrm{m}^{3} 15$ minutes. Form: Mist |
|  | OSHA PEL (United States, 2/2013). |
|  | TWA: $5 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. |

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 <br> eating, smoking and using the lavatory and at the end of the working period. <br> Appropriate techniques should be used to remove potentially contaminated clothing. <br> Wash contaminated clothing before reusing. Ensure that eyewash stations and safety |
| :--- | :--- |
| showers are close to the workstation location. |  |

## Skin protection

## Section 8. Exposure controls/personal protection

## Hand protection

Body protection

## Other skin protection

Respiratory protection
: Chemical-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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
: 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.
: 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.
: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

## Appearance

Physical state
Color
Odor
Odor threshold
pH
Melting point
Boiling point
Flash point
Evaporation rate
Flammability (solid, gas)
Lower and upper explosive
(flammable) limits
Vapor pressure
Vapor density
Relative density Solubility
Solubility in water
Partition coefficient: $\mathbf{n}$ octanol/water
Auto-ignition temperature
Decomposition temperature
SADT
Viscosity
Physical/chemical
properties comments
: Liquid. [Transparent oil.]
: Amber.
: Mineral oil.
: Not available.
: Not available.
: Pour point: - 37 to $-9^{\circ} \mathrm{C}\left(-34.6\right.$ to $15.8^{\circ} \mathrm{F}$ )
: >288 ${ }^{\circ} \mathrm{C}$ (>550.4$\left.{ }^{\circ} \mathrm{F}\right)$
: Open cup: 213 to $246^{\circ} \mathrm{C}$ ( 415.4 to $474.8^{\circ} \mathrm{F}$ ) [Cleveland.]
: <0.01 (butyl acetate = 1)
: Not applicable.
: Lower: 0.9\% Upper: 7\%
: <0.0013 kPa (<0.01 mm Hg)
: >5 [Air = 1]
: 0.87 to 0.9 [Water = 1]
: Not available.
: Not available.
: Not available.
: 240 to $304^{\circ} \mathrm{C}\left(464\right.$ to $579.2^{\circ} \mathrm{F}$ )
: Not available.
: Not available.
: Kinematic ( $40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right)$ ): 0.63 to $9.5 \mathrm{~cm}^{2} / \mathrm{s}(63$ to 950 cSt )
: Kinematic viscosity ( $100^{\circ} \mathrm{C}\left(212{ }^{\circ} \mathrm{F}\right)$ ): $9 \mathrm{~mm}^{2} / \mathrm{s}$ to $50 \mathrm{~mm}^{2} / \mathrm{s}$

## Section 10. Stability and reactivity

## Reactivity

Chemical stability : The product is stable.
Possibility of hazardous reactions

Conditions to avoid Incompatible materials

Hazardous decomposition : Under normal conditions of storage and use, hazardous decomposition products should products
: No specific test data related to reactivity available for this product or its ingredients.
: Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
: Keep away from heat and flame. Keep away from all sources of ignition.
: Reactive or incompatible with the following materials: oxidizing materials. Chlorine

## Section 11. Toxicological information

## Information on toxicological effects

## Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
| :--- | :--- | :--- | :--- | :--- |
| Distillates (petroleum), <br> hydrotreated light paraffinic | LC50 Inhalation Dusts and mists | Rat - Male, <br> Female | $>5.53 \mathrm{mg} / \mathrm{l}$ | 4 hours |

## Irritation/Corrosion

Not available.

## Sensitization

Not available.

## Mutagenicity

Conclusion/Summary : Not available.
Carcinogenicity
Conclusion/Summary : The mineral oils in the product contain < 3\% DMSO extract (IP 346).
Reproductive toxicity
Conclusion/Summary : Not available.
Teratogenicity
Conclusion/Summary : Not available.
Specific target organ toxicity (single exposure)

| Name | Category | Route of <br> exposure | Target organs |
| :--- | :--- | :--- | :--- |
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts | Category 3 | Not applicable. | Respiratory tract <br> irritation |

## Specific target organ toxicity (repeated exposure)

Not available.

## Aspiration hazard

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| :--- | :--- | :--- | :--- | :--- | :--- |

## Section 11. Toxicological information

| Name | Result |
| :--- | :--- |
| Residual oils (petroleum), solvent-dewaxed | ASPIRATION HAZARD - Category 1 |
| Distillates (petroleum), hydrotreated light paraffinic | ASPIRATION HAZARD - Category 1 |
| Distillates (petroleum), hydrotreated heavy paraffinic | ASPIRATION HAZARD - Category 1 |

Information on the likely : Routes of entry anticipated: Oral, Dermal, Inhalation.
routes of exposure
Potential acute health effects

| Eye contact | $:$ Causes serious eye irritation. |
| :--- | :--- |
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : Defatting to the skin. May cause skin dryness and irritation. |
| Ingestion | $:$ No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

| Eye contact | : Adverse symptoms may include the following: pain or irritation watering redness |
| :---: | :---: |
| Inhalation | : No specific data. |
| Skin contact | : Adverse symptoms may include the following: irritation dryness cracking |
| Ingestion | : No specific data. |

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

## Short term exposure

| Potential immediate <br> effects | $:$ Not available. |
| :--- | :--- | :--- |
| Potential delayed effects | $:$ Not available. |
| Long term exposure |  |
| Potential immediate <br> effects | $:$ Not available. |
| Potential delayed effects | $:$ Not available. |

## Potential chronic health effects

Not available.

| General | : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or |
| :--- | :--- |
| dermatitis. |  |
| Carcinogenicity | : 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

## Section 11. Toxicological information

Not available.

## Section 12. Ecological information

## Toxicity

Not available.

## Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
| :--- | :--- | :--- | :--- | :--- |
| Residual oils (petroleum), <br> solvent-dewaxed | OECD 301B <br> Ready <br> Biodegradability - <br> CO2 Evolution <br> Test | $6 \%-28$ days | - | - |
| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |  |
| Residual oils (petroleum), <br> solvent-dewaxed | - | - | Not readily |  |

## Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
| :--- | :--- | :--- | :--- |
| Distillates (petroleum), <br> hydrotreated light paraffinic | $>2$ | - | low |

## Mobility in soil

Soil/water partition : Not available.
coefficient (Koc)
Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

: 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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 | IMDG | IATA |
| :--- | :--- | :--- | :--- |
| UN number | Not regulated. | Not regulated. | Not regulated. |
| UN proper <br> shipping name | - | - | - |
| Transport <br> hazard class(es) | - | - | - |
| Packing group | - | - | No. |
| Environmental <br> hazards | No. | No. |  |
| Additional <br> information | - | - | - |

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
73/78 and the IBC Code

## Section 15. Regulatory information

U.S. Federal regulations
: TSCA 8(a) PAIR: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts; pdodecylphenol
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 307: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts
Clean Air Act Section 112 : Not listed
(b) Hazardous Air

Pollutants (HAPs)
Clean Air Act Section 602 : Not listed
Class I Substances
Clean Air Act Section 602 : Not listed
Class II Substances
DEA List I Chemicals : Not listed
(Precursor Chemicals)
DEA List II Chemicals : Not listed
(Essential Chemicals)
SARA 302/304
Composition/information on ingredients
No products were found.
SARA 304 RQ : Not applicable.
SARA 311/312

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## Section 15. Regulatory information

## Classification <br> : Immediate (acute) health hazard

Composition/information on ingredients

| Name | $\%$ | Fire <br> hazard | Sudden <br> release of <br> pressure | Reactive | Immediate <br> (acute) <br> health <br> hazard | Delayed <br> (chronic) <br> health <br> hazard |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Residual oils (petroleum), solvent- <br> dewaxed <br> Distillates (petroleum), hydrotreated <br> light paraffinic <br> Distillates (petroleum), hydrotreated <br> heavy paraffinic <br> Phosphorodithioic acid, O,O-di- <br> C1-14-alkyl esters, zinc salts <br> Methacrylate copolymer | $\geq 90$ | $\geq 90$ | No. | No. | No. | Yes. |
| No. | No. | No. | Yes. | No. |  |  |

SARA 313

|  | Product name | CAS number | $\%$ |
| :--- | :--- | :--- | :--- |
| Form $\mathbf{R}$ - Reporting <br> requirements | Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, <br> zinc salts | $68649-42-3$ | $\geq 1-<3$ |
| Supplier notification | Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, <br> zinc salts | $68649-42-3$ | $\geq 1-<3$ |

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: MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT PARAFFINIC
New York
New Jersey : The following components are listed: MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL; MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL; MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL; ZINC compounds
Pennsylvania : The following components are listed: ZINC COMPOUNDS
California Prop. 65
None of the components are listed.

## Chemical Weapon Convention List Schedules I, II \& III Chemicals

Not listed.

## Montreal Protocol (Annexes A, B, C, E)

Not listed.
Stockholm Convention on Persistent Organic Pollutants
Not listed.

## Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

## UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

## Section 16. Other information

Hazardous Material Information System (U.S.A.)


Caution: HMIS® ratings are based on a $0-4$ rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS $®$ is a registered mark of the National Paint \& Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.
The customer is responsible for determining the PPE code for this material.
National Fire Protection Association (U.S.A.)


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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

## Procedure used to derive the classification

| Classification | Justification |
| :--- | :--- |
| Eye Irrit. 2A, H319 | Calculation method |

## History

Date of issue/Date of : 10/07/2015
revision
Date of previous issue
Version
Prepared by
Key to abbreviations

References
: 10/07/2015
: 10/01/2015
: 2
: IHS
: 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 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
: HCS (U.S.A.)- Hazard Communication Standard International transport regulations

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| :--- | :--- | :--- | :--- | :--- | :--- |

## Section 16. Other information

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.

