SAFETY DATA SHEET



Cop-R-Lube®

Section 1. Identification

Product identifier: Cop-R-Lube®Product code: Not available.Other means of: Not available.

identification

Product type : semi-solid

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

Product use : Sealants, Antiseize agents, Lubricants

Area of application : Industrial applications, Professional applications.

Supplier's details : Topco Oilsite Products Ltd.

Bay 7, 3401 – 19th Street N.E. Calgary, Alberta Canada T2E 6S8

www.topcooilsite.com

403-219-0255

e-mail address of person responsible for this SDS

: msds@topcooilsite.com

Emergency telephone number (with hours of

: Manufacturer: 403-219-0255 - (Topco Oil Emergency)
Poison & Drug Information Service (Alberta Health services):

operation) 1-800-332-1414

Section 2. Hazard identification

Classification of the : H319 EYE IRRITATION - Category 2A

substance or mixture Health Hazards Not Otherwise Classified - Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H319 - Causes serious eye irritation.

No code - Prolonged or repeated contact may dry skin and cause irritation.

Precautionary statements

Prevention : P280 - Wear eye or face protection.

P264 - Wash hands thoroughly after handling.

Response : 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.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label

elements

: Avoid contact with skin and clothing. Wash thoroughly after handling.

Section 2. Hazard identification

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

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal

toxicity: 32.8%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation

toxicity: 44.5%

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of

Not available.

identification

| Ingredient name | % (w/w) | CAS number |
|---|-------------------------------------|--|
| Natural graphite copper | 10 - 30 (1) 10 - 30 (1) | 7782-42-5 7440-50-8 |
| Talc , containing asbestiform fibres calcium carbonate | 5 - 10 (1) 5 - 10 (1) | 14807-96-6 471-34-1 |
| Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts Sulfonic acids, petroleum, calcium salts calcium dodecylbenzenesulphonate | 1 - 5 (1) 1 - 5 (1) 1 - 5 (1) | 68584-23-6 61789-86-4 26264-06-2 |
| crystalline silica, respirable powder | 1 - 5 (1) | 14808-60-7 |

⁽¹⁾ The actual concentration or actual concentration range is withheld as a trade secret.

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

Section 4. First-aid measures

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

: Use dry chemical, CO₂, alcohol-resistant foam or water spray (fog).

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

Hazardous thermal decomposition products

: No specific fire or explosion hazard.

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide sulfur oxides

halogenated compounds metal oxide/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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 non-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

: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. 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

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. 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.

Advice on general occupational hygiene

: 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 |
|--------------------------------------|---|
| Natural graphite | CA British Columbia Provincial (Canada, 5/2019). TWA: 2 mg/m³ 8 hours. Form: Respirable CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 2 mg/m³ 8 hours. Form: Respirable (all forms except graphite fibres) CA Quebec Provincial (Canada, 1/2014). TWAEV: 2 mg/m³ 8 hours. Form: Respirable dust. CA Ontario Provincial (Canada, 1/2018). TWA: 2 mg/m³ 8 hours. Form: Respirable fraction. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 4 mg/m³ 15 minutes. Form: respirable fraction TWA: 2 mg/m³ 8 hours. Form: respirable fraction |
| copper | CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 1 mg/m³, (as Cu) 8 hours. Form: Dusts and Mists 8 hrs OEL: 0.2 mg/m³ 8 hours. Form: Fume CA British Columbia Provincial (Canada, 5/2019). TWA: 1 mg/m³, (as Cu) 8 hours. Form: Dusts and mists TWA: 0.2 mg/m³, (as Cu) 8 hours. Form: Fume CA Ontario Provincial (Canada, 1/2018). TWA: 0.2 mg/m³ 8 hours. Form: Fume TWA: 1 mg/m³ 8 hours. Form: dust and mists |
| | CA Saskatchewan Provincial (Canada, 7/2013). STEL: 0.6 mg/m³, (measured as Cu) 15 minutes. Form: Fume TWA: 0.2 mg/m³, (measured as Cu) 8 hours. Form: Fume STEL: 3 mg/m³, (measured as Cu) 15 minutes. Form: dust and mist TWA: 1 mg/m³, (measured as Cu) 8 hours. Form: dust and mist CA Quebec Provincial (Canada, 1/2014). TWAEV: 1 mg/m³, (as Cu) 8 hours. Form: dusts & mists |
| | TWAEV: 0.2 mg/m³, (as Cu) 8 hours. Form: fume |
| Talc , containing asbestiform fibres | CA British Columbia Provincial (Canada, 5/2019). TWA: 2 mg/m³ 8 hours. Form: Respirable TWA: 0.1 f/cc 8 hours. CA Quebec Provincial (Canada, 1/2014). |

calcium carbonate

crystalline silica, respirable powder

Section 8. Exposure controls/personal protection

TWAEV: 3 mg/m³ 8 hours. Form:

Respirable dust.

CA Ontario Provincial (Canada, 1/2018).

TWA: 2 mg/m³ 8 hours. Form: Respirable fraction.

TWA: 2 f/cc 8 hours.

CA Saskatchewan Provincial (Canada, 7/2013).

TWA: 2 mg/m³ 8 hours. Form: respirable

fraction

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 10 mg/m³ 8 hours. Form: Total

dust.

CA Alberta Provincial (Canada, 6/2018).

8 hrs OEL: 10 mg/m³ 8 hours.

CA British Columbia Provincial (Canada, 5/2019).

TWA: 0.025 mg/m³ 8 hours. Form:

Respirable

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 0.1 mg/m³ 8 hours. Form:

Respirable dust.

CA Ontario Provincial (Canada, 1/2018).

TWA: 0.1 mg/m³ 8 hours. Form: Respirable

fraction.

CA Alberta Provincial (Canada, 6/2018).

8 hrs OEL: 0.025 mg/m³ 8 hours. Form:

Respirable particulate

CA Saskatchewan Provincial (Canada, 7/2013).

TMA.OOF

TWA: 0.05 mg/m³ 8 hours. Form:

respirable fraction

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: chemical splash goggles.

Skin protection

Section 8. Exposure controls/personal protection

Hand 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. 4 - 8 hours (breakthrough time): Rubber gloves. 5 mm thickness.

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 : Solid. [semi-solid]

Color : Copper

Odor : Petroleum. [Slight] : Not available. **Odor threshold** pH Not available. **Melting point** : Not available. **Boiling point** : 260°C (500°F)

: Closed cup: >171°C (>339.8°F) Flash point

: Not available. **Evaporation rate** Flammability (solid, gas) : Not available. Lower and upper explosive

(flammable) limits

: Not available.

Vapor pressure : Not available. Vapor density : Not available. **Relative density** : Not available.

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

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Not available. **Decomposition temperature** : Not available. **Viscosity** : Not available. Flow time (ISO 2431) : Not available.

Section 10. Stability and reactivity

Reactivity : No s

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

occur.

Conditions to avoid : No specific data.

Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials.

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 |
|----------------------------|---------------------------------|----------------|-------------|----------|
| copper | LC50 Inhalation Dusts and mists | Rat | >5.11 mg/l | 4 hours |
| | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | >2500 mg/kg | - |
| calcium carbonate | LD50 Dermal | Rat - Male, | >2000 mg/kg | - |
| | | Female | | |
| | LD50 Oral | Rat | 6450 mg/kg | - |
| Benzenesulfonic acid, | LD50 Dermal | Rabbit - Male, | >4000 mg/kg | - |
| C10-16-alkyl derivs., | | Female | | |
| calcium salts | | | | |
| Sulfonic acids, petroleum, | LD50 Dermal | Rabbit | >5 g/kg | - |
| calcium salts | 1 D50 O1 | D-4 | | |
| | LD50 Oral | Rat | >5 g/kg | - |
| calcium | LD50 Oral | Rat | 1300 mg/kg | - |
| dodecylbenzenesulphonate | | | | |

Conclusion/Summary

: Not available.

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|--------------------|-------------|
| calcium carbonate | Eyes - Severe irritant | Rabbit | - | 24 hours 750 ug | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |

Conclusion/Summary

Skin: Not available.Eyes: Not available.Respiratory: Not available.

Sensitization

Conclusion/Summary

Skin : Not available.

Respiratory : Not available.

Mutagenicity

Section 11. Toxicological information

Conclusion/Summary

: Not available.

Carcinogenicity

Conclusion/Summary

: Prolonged and/or massive exposure to respirable crystalline silica (quartz)-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica. During

application, the product does not form dust. 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 | 3 3 3 | Route of exposure | Target organs |
|----------------------------------|------------|-------------------|------------------------------|
| calcium dodecylbenzenesulphonate | Category 3 | ' ' | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

| Name | , , , | Route of exposure | Target organs |
|---------------------------------------|------------|-------------------|---------------|
| Natural graphite | Category 1 | Inhalation | lungs |
| Talc , containing asbestiform fibres | Category 1 | Not determined | lungs |
| crystalline silica, respirable powder | Category 1 | Inhalation | lungs |

Aspiration hazard

Not available.

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.

<u>Delayed and immediate effects and also chronic effects from short and long term exposure</u> Short term exposure

Section 11. Toxicological information

Potential immediate

effects

: Not available.

Potential delayed effects

: Not available.

Long term exposure

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary: 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

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|------------------|-------------------|--------------------------------|----------------------------------|--|
| Cop-R-Lube® | 12683.2 | 9026.7 | N/A | N/A | N/A |
| copper | 2500 | 2500 | N/A | N/A | N/A |
| calcium carbonate | 6450 | 2500 | N/A | N/A | N/A |
| Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts | N/A | 2500 | N/A | N/A | N/A |
| calcium dodecylbenzenesulphonate | 1300 | N/A | N/A | N/A | N/A |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|------------------------------------|--|----------|
| copper | Acute EC50 1100 μg/l Fresh water | Aquatic plants - Lemna minor | 4 days |
| | Acute EC50 2.1 μg/l Fresh water | Daphnia - Daphnia longispina - Juvenile (Fledgling, Hatchling, Weanling) | 48 hours |
| | Acute IC50 13 μg/l Fresh water | Algae - Pseudokirchneriella subcapitata - Exponential growth phase | 72 hours |
| | Acute IC50 5.4 mg/l Marine water | Aquatic plants - Plantae - Exponential growth phase | 72 hours |
| | Acute LC50 0.072 µg/l Marine water | Crustaceans - Amphipoda - Adult | 48 hours |
| | Acute LC50 7.56 μg/l Marine water | Fish - Periophthalmus waltoni - Adult | 96 hours |
| | Chronic NOEC 2.5 µg/l Marine water | Algae - Nitzschia closterium - Exponential growth phase | 72 hours |
| | Chronic NOEC 7 mg/l Fresh water | Aquatic plants - Ceratophyllum | 3 days |

Section 12. Ecological information

| <u></u> | | 1 | |
|----------------------------|------------------------------------|---------------------------------|----------|
| | | demersum | |
| | Chronic NOEC 0.02 mg/l Fresh water | Crustaceans - Cambarus | 21 days |
| | | bartonii - Mature | |
| | Chronic NOEC 2 µg/l Fresh water | Daphnia - Daphnia magna | 21 days |
| | Chronic NOEC 0.8 µg/l Fresh water | Fish - Oreochromis niloticus - | 6 weeks |
| | | Juvenile (Fledgling, Hatchling, | |
| | | Weanling) | |
| calcium carbonate | Acute EC50 >100 mg/l Fresh water | Daphnia | 48 hours |
| | Acute LC50 >56000 ppm Fresh water | Fish - Gambusia affinis - Adult | 96 hours |
| | Chronic NOEC 61 mg/g Fresh water | Fish - Oncorhynchus mykiss - | 28 days |
| | | Juvenile (Fledgling, Hatchling, | _ |
| | | Weanling) | |
| Sulfonic acids, petroleum, | Acute EC50 >1000 mg/l Fresh water | Algae - Pseudokirchneriella | 96 hours |
| calcium salts | | subcapitata | |
| | Acute EC50 >1000 mg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute NOEC 1000 mg/l Fresh water | Algae - Pseudokirchneriella | 96 hours |
| | | subcapitata | |

Conclusion/Summary: Not available.

Persistence and degradability

Conclusion/Summary: Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| Sulfonic acids, petroleum, calcium salts | - | | Not readily |
| calcium dodecylbenzenesulphonate | - | - | Readily |

Bioaccumulative potential

Not available.

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. 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

| | TDG Classification | DOT Classification | ADR/RID | IMDG | IATA |
|----------------------------|-----------------------|-----------------------|----------------|----------------|----------------|
| UN number | Not regulated. | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - | - | - |
| Transport hazard class(es) | - | - | - | - | - |
| Packing group | - | - | - | - | - |
| Environmental hazards | No. | No. | No. | No. | No. |

Additional information

DOT Classification : Reportable quantity 45913.7 lbs / 20844.8 kg. Package sizes shipped in quantities

less than the product reportable quantity are not subject to the RQ (reportable

quantity) transportation requirements.

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

to Annex II of MARPOL and

the IBC Code

: Not available.

Section 15. Regulatory information

Canadian lists

Canadian NPRI : The following components are listed: copper (and its compounds)

CEPA Toxic substances: None of the components are listed.

Canada inventory : Not determined.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

History

Date of issue/Date of

Date of previous issue

revision

: No previous validation

: 10/12/2019

Version :

Prepared by : Sphera Solutions

Key to abbreviations : ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HPR = Hazardous Products Regulations 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 UN = United Nations

Procedure used to derive the classification

| Classification | Justification |
|----------------|--|
| 3 7 | Calculation method On basis of test data |

References : HPR = Hazardous Products Regulations

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 abovenamed 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.