

# SAFETY DATA SHEET

S62008000

## Section 1. Identification

**Product name** : LU™620 Anti-Seize Compound  
**Product code** : S62008000  
**Other means of identification** : Not available.  
**Product type** : Solid.  
**Relevant identified uses of the substance or mixture and uses advised against**

Paint or paint related material.

**Manufacturer** : Sprayon Products Group  
101 W. Prospect Avenue,  
Cleveland, Ohio 44115

**Emergency telephone number of the company** : US / Canada: (800) 424-9300  
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

**Product Information Telephone Number** : US / Canada: (800) 247-3266  
Mexico: Not Available

**Regulatory Information Telephone Number** : US / Canada: (216) 566-2902  
Mexico: Not Available

**Transportation Emergency Telephone Number** : US / Canada: (800) 424-9300  
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

## 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:  
1.5%

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity:  
6%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 6%

### GHS label elements

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

### Precautionary statements

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Date of issue/Date of revision** : 11/30/2019 **Date of previous issue** : 8/26/2019

**Version** : 8

1/12

S62008000 LU™620 Anti-Seize Compound

SHW-85-NA-GHS-US

## Section 2. Hazards identification

**Supplemental label elements** FOR INDUSTRIAL USE ONLY.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

### CAS number/other identifiers

Ingredient name	% by weight	CAS number
Heavy Paraffinic Oil	≥25 - ≤50	64742-54-7
Graphite	≥10 - ≤25	7782-42-5
Copper	≤5	7440-50-8
Fumed Amorphous Silica	≤5	112945-52-5
Aluminum	≤3	7429-90-5

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 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.
- 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** : 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.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

## Section 4. First aid measures

### 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.

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** : None known.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
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. 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. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, 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).
- 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.

- Conditions for safe storage, including any incompatibilities** : 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 (OSHA United States)

Ingredient name	CAS #	Exposure limits
Heavy Paraffinic Oil	64742-54-7	<b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m <sup>3</sup> 8 hours.
Graphite	7782-42-5	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction <b>NIOSH REL (United States, 10/2016).</b> TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist <b>ACGIH TLV (United States, 3/2019).</b> TWA: 2 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction <b>NIOSH REL (United States, 10/2016).</b> TWA: 2.5 mg/m <sup>3</sup> 10 hours. Form: Respirable fraction
Copper	7440-50-8	<b>OSHA PEL Z3 (United States, 6/2016).</b> TWA: 15 mppcf 8 hours. <b>ACGIH TLV (United States, 3/2019).</b> TWA: 1 mg/m <sup>3</sup> , (as Cu) 8 hours. Form: Dust and mist TWA: 0.2 mg/m <sup>3</sup> 8 hours. Form: Fume <b>NIOSH REL (United States, 10/2016).</b> TWA: 1 mg/m <sup>3</sup> , (as Cu) 10 hours. Form: Dusts and Mists <b>OSHA PEL (United States, 5/2018).</b> TWA: 1 mg/m <sup>3</sup> 8 hours. Form: Dusts and Mists TWA: 0.1 mg/m <sup>3</sup> 8 hours. Form: Fume
Fumed Amorphous Silica	112945-52-5	<b>NIOSH REL (United States, 10/2016).</b> TWA: 6 mg/m <sup>3</sup> 10 hours.
Aluminum	7429-90-5	<b>NIOSH REL (United States, 10/2016).</b> TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Respirable fraction TWA: 10 mg/m <sup>3</sup> 10 hours. Form: Total <b>ACGIH TLV (United States, 3/2019).</b>

## Section 8. Exposure controls/personal protection

		<p>TWA: 1 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction  <b>OSHA PEL (United States, 5/2018).</b>  TWA: 5 mg/m<sup>3</sup>, (as Al) 8 hours. Form: Respirable fraction  TWA: 15 mg/m<sup>3</sup>, (as Al) 8 hours. Form: Total dust</p>
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**Occupational exposure limits (Canada)**

<b>Ingredient name</b>	<b>CAS #</b>	<b>Exposure limits</b>
Synthetic graphite	7782-42-5	<p><b>CA British Columbia Provincial (Canada, 5/2019).</b>  TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable</p> <p><b>CA Alberta Provincial (Canada, 6/2018).</b>  8 hrs OEL: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable (all forms except graphite fibres)</p> <p><b>CA Quebec Provincial (Canada, 1/2014).</b>  TWAEV: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable dust.</p> <p><b>CA Ontario Provincial (Canada, 1/2018).</b>  TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b>  STEL: 4 mg/m<sup>3</sup> 15 minutes. Form: respirable fraction  TWA: 2 mg/m<sup>3</sup> 8 hours. Form: respirable fraction</p>
Copper	7440-50-8	<p><b>CA Alberta Provincial (Canada, 6/2018).</b>  8 hrs OEL: 1 mg/m<sup>3</sup>, (as Cu) 8 hours. Form: Dusts and Mists  8 hrs OEL: 0.2 mg/m<sup>3</sup> 8 hours. Form: Fume</p> <p><b>CA British Columbia Provincial (Canada, 5/2019).</b>  TWA: 1 mg/m<sup>3</sup>, (as Cu) 8 hours. Form: Dusts and mists  TWA: 0.2 mg/m<sup>3</sup>, (as Cu) 8 hours. Form: Fume</p> <p><b>CA Ontario Provincial (Canada, 1/2018).</b>  TWA: 0.2 mg/m<sup>3</sup> 8 hours. Form: Fume  TWA: 1 mg/m<sup>3</sup> 8 hours. Form: dust and mists</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b>  STEL: 0.6 mg/m<sup>3</sup>, (measured as Cu) 15 minutes. Form: Fume  TWA: 0.2 mg/m<sup>3</sup>, (measured as Cu) 8 hours. Form: Fume  STEL: 3 mg/m<sup>3</sup>, (measured as Cu) 15 minutes. Form: dust and mist  TWA: 1 mg/m<sup>3</sup>, (measured as Cu) 8 hours. Form: dust and mist</p> <p><b>CA Quebec Provincial (Canada, 1/2014).</b>  TWAEV: 1 mg/m<sup>3</sup>, (as Cu) 8 hours. Form: dusts &amp; mists  TWAEV: 0.2 mg/m<sup>3</sup>, (as Cu) 8 hours. Form: fume</p>

## Section 8. Exposure controls/personal protection

### Occupational exposure limits (Mexico)

	CAS #	Exposure limits
Copper	7440-50-8	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 0.2 mg/m <sup>3</sup> , (as Cu) 8 hours. Form: Fumes TWA: 1 mg/m <sup>3</sup> , (as Cu) 8 hours. Form: powder and mist

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : 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 side-shields.

### Skin 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.

- 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.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Boiling point/boiling range** : Not available.
- Flash point** : Open cup: >94°C (>201.2°F) [Cleveland Open Cup]
- Evaporation rate** : Not available.

## Section 9. Physical and chemical properties

- Flammability (solid, gas)** : Not available.  
**Lower and upper explosive (flammable) limits** : Not available.  
**Vapor pressure** : Not relevant/applicable due to nature of the product.  
**Vapor density** : Not available.  
**Relative density** : 1.03  
**Solubility** : Not available.  
**Partition coefficient: n-octanol/water** : Not available.  
**Auto-ignition temperature** : Not available.  
**Decomposition temperature** : Not available.  
**Viscosity** : Kinematic (40°C (104°F)): -0.01 cm<sup>2</sup>/s (-1 cSt)  
**Molecular weight** : Not applicable.

## 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.  
**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
Fumed Amorphous Silica	LD50 Oral	Rat	3160 mg/kg	-

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Classification

# Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
Fumed Amorphous Silica	-	3	-

## 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

Not available.

**Information on the likely routes of exposure** : Not available.

## 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** : No 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 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

Not available.

- General** : No known significant effects or critical hazards.
- 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.



## Section 11. Toxicological information

**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	11111.11 mg/kg

## 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 demersum	3 days
	Chronic NOEC 0.02 mg/l Fresh water	Crustaceans - Cambarus bartonii - Mature	21 days
	Chronic NOEC 2 µg/l Fresh water Chronic NOEC 0.8 µg/l Fresh water	Daphnia - Daphnia magna Fish - Oreochromis niloticus - Juvenile (Fledgling, Hatchling, Weanling)	21 days 6 weeks
Aluminum	Acute LC50 38000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 120 µg/l Fresh water	Fish - Oncorhynchus mykiss - Embryo	96 hours
	Chronic NOEC 9 mg/l Fresh water	Aquatic plants - Ceratophyllum demersum	3 days

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

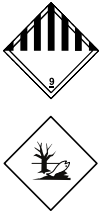


**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**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	Mexico Classification	IATA	IMDG
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	UN3077	UN3077
<b>UN proper shipping name</b>	-	-	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper)	Environmentally hazardous substance, solid, n.o.s. (Copper). Marine pollutant (Copper)
<b>Transport hazard class(es)</b>	-	-	-	9 	9  
<b>Packing group</b>	-	-	-	III	III
<b>Environmental hazards</b>	No.	No.	No.	Yes.	Yes.
<b>Additional information</b>	-	-	-	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. <b>Emergency schedules</b> F-A, S-F

## Section 14. Transport information

**Special precautions for user** : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

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

**Proper shipping name** : Not available.

**Ship type** : Not available.

**Pollution category** : Not available.

## Section 15. Regulatory information

### SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

### California Prop. 65

Not applicable.

### International regulations

#### **International lists**

- Australia inventory (AICS)**: Not determined.
- China inventory (IECSC)**: Not determined.
- Japan inventory (ENCS)**: Not determined.
- Japan inventory (ISHL)**: Not determined.
- Korea inventory (KECI)**: Not determined.
- New Zealand Inventory of Chemicals (NZIoC)**: Not determined.
- Philippines inventory (PICCS)**: Not determined.
- Taiwan Chemical Substances Inventory (TCSI)**: Not determined.
- Thailand inventory**: Not determined.
- Turkey inventory**: Not determined.
- Vietnam inventory**: Not determined.

## Section 16. Other information

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

Health	/	2
Flammability		0
Physical hazards		1

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

**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 and the associated label are not required on SDSs or products leaving a facility 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 trademark and service mark of the American Coatings Association, Inc.

### Procedure used to derive the classification

Classification	Justification
Not classified.	

## Section 16. Other information

### History

**Date of printing** : 11/30/2019

**Date of issue/Date of revision** : 11/30/2019

**Date of previous issue** : 8/26/2019

**Version** : 8

**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

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.