# Safety Data Sheet RJ6507

# 1. Product and company identification

Product name : RJ6507

Material uses : Industrial applications: Scavengers

Internal code : OFS2956

System code : OFS2956

Date of issue/Date of revision : 2019-12-16

Date of previous issue : No previous validation

Version : 1

**Supplier** : Highline Energy Services

2264 G Road

Grand Junction, CO 81505

**Information contact** : +1 970 712-8109 **Emergency phone**: : +1 970 712-8109

## Section 2. Hazards identification

**OSHA/HCS** status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: EYE IRRITATION - Category 2A

**RESPIRATORY SENSITIZATION - Category 1** 

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A

TOXIC TO REPRODUCTION (Unborn child) - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

**GHS label elements** 

Hazard pictograms



Signal word : Danger

**Hazard statements**: H319 - Causes serious eye irritation.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 - May cause an allergic skin reaction.

H350 - May cause cancer.

H360 - May damage the unborn child.

H373 - May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements** 

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# Section 2. Hazards identification

**Prevention**: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.

P284 - Wear respiratory protection.

P260 - Do not breathe vapor.

P264 - Wash hands thoroughly after handling.

P272 (OSHA) - Contaminated work clothing must not be allowed out of the workplace.

Response : P314 - Get medical attention if you feel unwell.

P308 + P313 - IF exposed or concerned: Get medical attention.

P304 + P341 (OSHA) - IF INHALED: If breathing is difficult, remove person to fresh air

and keep comfortable for breathing.

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or

physician.

P302 + P352 + P363 - IF ON SKIN: Wash with plenty of soap and water. Wash

contaminated clothing before reuse.

P333 + P313 - If skin irritation or rash occurs: Get medical attention.

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 : P405 - Store locked up.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Supplemental label elements

: Do not taste or swallow. Wash thoroughly after handling.

**Hazards not otherwise** 

: Causes digestive tract burns.

classified

See toxicological information (Section 11)

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
, 5	30 - 60 0.09 - 0.99	10192-30-0 7786-81-4

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

#### **Additional information**

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 it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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. 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. In the event of any complaints or symptoms, avoid further exposure.

#### **Skin contact**

: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

#### Ingestion

: Remove dentures if any. Wash out mouth with water. Stop if the exposed person feels sick as vomiting may be dangerous. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. 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.

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Skin contact**: May cause an allergic skin reaction.

**Ingestion** : Corrosive to the digestive tract. Causes burns.

#### Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering redness

#### Inhalation

: Adverse symptoms may include the following:

wheezing and breathing difficulties

asthma

reduced fetal weight increase in fetal deaths skeletal malformations

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## Section 4. First aid measures

Skin contact : Adverse symptoms may include the following:

> irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

#### 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.

**Specific treatments** 

: No specific treatment.

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

# Section 5. Fire-fighting measures

#### **Extinguishing media**

media

Suitable extinguishing

: Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing** 

media

: None known.

Specific hazards arising from the chemical

**Hazardous thermal** decomposition products : Decomposition products may include the following materials: 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.

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

**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.

**Flash point** : Closed cup: >93.3°C (>199.9°F)

# 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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## Section 6. Accidental release measures

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. 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**

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.

#### Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. 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.

# Section 8. Exposure controls/personal protection

#### **Control parameters**

Occupational exposure limits

# Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
nickel sulfate	NIOSH REL (United States, 10/2016).  TWA: 0.015 mg/m³, (as Ni) 10 hours.  ACGIH TLV (United States, 3/2018).  TWA: 0.1 mg/m³, (as Ni) 8 hours. Form: Inhalable fraction  OSHA PEL 1989 (United States, 3/1989).  TWA: 0.1 mg/m³, (as Ni) 8 hours. Form: Soluble  OSHA PEL (United States, 5/2018).  TWA: 1 mg/m³, (as Ni) 8 hours.

# Appropriate engineering controls

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

# **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. Contaminated work clothing should not be allowed out of the workplace. 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

**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.

#### **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 : Clear. Light Blue. Light blue-green.

Odor : Not available.
Odor threshold : Not available.
pH : 5.1 to 5.7
Melting point/freezing point : Not available.
Boiling point : 100°C (212°F)

Flash point : Closed cup: >93.3°C (>199.9°F)

Evaporation rate : <1 compared with ether (anhydrous)

Flammability (solid, gas)
Lower and upper explosive

(flammable) limits

Not available.Not available.

Vapor pressure : Highest known value: 3.2 kPa (23.8 mm Hg) (at 20°C) (water).

Vapor density: 1 (Air = 1)Density: 1.386 g/cm³Specific gravity: Not available.Density: 11.17 lbs/gal

**Solubility** : Easily soluble in the following materials: cold water, hot water.

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature: Not available.Decomposition temperature: Not available.Viscosity: 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

Incompatible materials : No specific data.
 Hazardous decomposition : Under normal conditions of storage and use, hazardous decomposition products should

**products** not be produced.

# **Section 11. Toxicological information**

#### Information on toxicological effects

**Acute toxicity** 

Not available.

Potential chronic health effects

Not available.

Irritation/Corrosion

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# Section 11. Toxicological information

Product/ingredient name	Test	Species	Result
nickel sulfate	-	Woman	Skin - Mild irritant -

#### **Sensitization**

Not available.

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

#### **Classification**

Product/ingredient name	OSHA	IARC	NTP
nickel sulfate	-	1	-

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
nickel sulfate	Category 1	Not determined	Not determined

#### **Aspiration hazard**

Not available.

# Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
nickel sulfate	Acute IC50 7.28 mg/l Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	72 hours
	Acute IC50 4.59 mg/l Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	96 hours
	Acute LC50 125000 μg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 180 μg/l Fresh water Acute LC50 1280 μg/l Fresh water	Daphnia - Daphnia magna Fish - Oncorhynchus mykiss - Larvae	48 hours 96 hours

#### Persistence and degradability

#### **Bioaccumulative potential**

Not available.

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# Section 13. Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any byproducts 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	UN2693	UN2693	UN2693
UN proper shipping name	Bisulfites, aqueous solutions, n. o.s. (Ammonium Hydrogen Sulfite) RQ (Ammonium Hydrogen Sulfite, nickel sulphate)	BISULPHITES, AQUEOUS SOLUTION, N.O.S. (Ammonium Hydrogen Sulfite)	Bisulphites, aqueous solution, n.o.s. (Ammonium Hydrogen Sulfite)
Transport hazard class(es)	8 CORROSIVE	8	8
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Additional information	Reportable quantity 8547 lbs / 3880.3 kg [739.59 gal / 2799.7 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.  Limited quantity Yes.  Packaging instruction  Exceptions: 154. Non-bulk: 203. Bulk: 241.  Quantity limitation Passenger aircraft/rail: 5 L. Cargo aircraft: 60 L.  Special provisions IB3, T7, TP1, TP28	Emergency schedules F-A, S-B Special provisions 274	The environmentally hazardous substance mark may appear if required by other transportation regulations.  Quantity limitation Passenger and Cargo Aircraft: 5 L. Packaging instructions: 852. Cargo Aircraft Only: 60 L. Packaging instructions: 856. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y841.  Special provisions A803

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# **Section 14. Transport 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.

# Section 15. Regulatory information

**U.S. Federal regulations** 

: United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: nickel sulphate

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs) SARA 302/304** 

Listed

#### **Composition/information on ingredients**

			SARA 302 TPQ		SARA 304 RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
formaldehyde	0 - 0.09	Yes.	500	55	100	11

**SARA 304 RQ** : 25252525.3 lbs / 11464646.5 kg [2185165.4 gal / 8271750.7 L]

**SARA 311/312** 

Classification : Immediate (acute) health hazard Delayed (chronic) health hazard

#### **Composition/information on ingredients**

Name	%		Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
ammonium hydrogen sulfite nickel sulfate		No. No.	No. No.	No. No.	Yes. Yes.	No. Yes.

#### **SARA 313**

	Product name	CAS number	%
Form R - Reporting requirements	, ,		30 - 60 0.09 - 0.99
Supplier notification	, ,		30 - 60 0.09 - 0.99

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: AMMONIUM BISULFITE

**New York** 

: The following components are listed: Ammonium bisulfite; Nickel sulfate

**New Jersey** 

The following components are listed: AMMONIUM BISULFITE; SULFUROUS ACID, MONOAMMONIUM SALT; NICKEL SULFATE; SULFURIC ACID, NICKEL(2+) SALT (1:

1)

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# **Section 15. Regulatory information**

#### **Pennsylvania**

: The following components are listed: SULFUROUS ACID, MONOAMMONIUM SALT; SULFURIC ACID, NICKEL(2+) SALT (1:1)

#### California Prop. 65

: **WARNING**: This product can expose you to chemicals including nickel sulfate, formaldehyde, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level	Contains : % or ppm
nickel sulphate Formaldehyde, solution	Yes. Yes.	No. No.			<1 ≤0.1

#### **International lists**

**National inventory** 

**Australia inventory (AICS)** 

**Canada inventory** 

China inventory (IECSC)

**Europe inventory** 

Japan inventory (ENCS)

Korea inventory (KECI)

**Taiwan inventory (TCSI)** 

**Philippines inventory (PICCS)** 

United States inventory (TSCA 8b)

: All components are listed or exempted.

: Japan inventory (ENCS): All components are listed or

exempted.

Japan inventory (ISHL): Not determined.

: All components are listed or exempted.

: All components are listed or exempted.

: All components are listed or exempted.

Not determined.

: All components are listed or exempted.

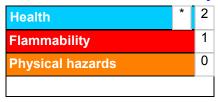
Our REACH (pre-) registrations DO NOT cover the following:

**New Zealand Inventory of Chemicals (NZIoC)** 

- 1. The manufacture of these products by our company outside the EU unless covered by the Only Representative provisions, and
- 2. The importation of these products into Europe by other companies. Re-importation by other companies is not covered by our (pre-) registrations Customers and other third parties importing and/or re-importing our products into Europe will need either:
- Their own (pre-) registration for substances contained in the imported product, or constituent monomers (imported above 1 tonne per year and >2% by weight) in the case of imported polymers, or
- In the case of importation only, to make use of the "Only Representative" provisions, if available

# **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 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.

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.

**National Fire Protection Association (U.S.A.)** 

# **Section 16. Other information**



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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.

#### **History**

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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)

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 quarantee that these are the only hazards that exist.