

SAFETY DATA SHEET

RELOAD 22-3-2



Section 1. Identification

Product identifier : RELOAD 22-3-2
Product code : 1000545951
SDS # : 241
Product type : Liquid.

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

Identified uses
Fertilizer.
Uses advised against
Not available.

Supplier's details : LOVELAND PRODUCTS, INC.
P.O. Box 1286
Greeley, CO 80632-1286
Telephone no.: : 1-888-574-2878 (Customer Service)
Email : retail-SDS2@nutrien.com
Emergency telephone number (with hours of operation) : CHEMTREC: 1-800-424-9300 (24 hrs)
Medical Emergencies: 1-866-944-8565 (24 hrs)

Section 2. Hazard 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 2B

GHS label elements

Hazard pictograms : Not applicable.
Signal word : Warning
Hazard statements : Causes eye irritation.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention : Wash thoroughly after handling.
Response : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage : Not applicable.
Disposal : Not applicable.

Section 3. Composition/information on ingredients

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

Ingredient name	% (w/w)	CAS number
ammonium nitrate	25 - 30	6484-52-2
urea	20 - 25	57-13-6
ammonium sulfate	5 - 7	7783-20-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified 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** : Begin eye irrigation immediately. Exposures to eye irritants may require medical evaluation following decontamination if pain or irritation persists. Immediately rinse eyes with large quantities of water or saline for a minimum of 15 minutes. If possible, remove contact lenses being careful not to cause additional eye damage. If the initial water supply is insufficient, keep the affected area wet with a moist cloth and transfer the person to the nearest place where rinsing can be continued for the recommended length of time. For additional advice call the medical emergency number on this SDS or your poison center or doctor. Get medical attention if irritation occurs.
- Inhalation** : Remove person to fresh air. No known significant effects. Seek medical attention for any signs of wheezing and/or breathing difficulties. For additional advice call the medical emergency number on this SDS or your poison center or medical provider.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Clean shoes thoroughly before reuse. Wash clothing before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. 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. Never give anything by mouth to an unconscious person. 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. 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 eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause slight transient irritation.
- Ingestion** : Nitrate based product. May be irritating to mouth, throat and stomach. Over-exposure by ingestion is unlikely under normal working conditions.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
 irritation
 watering
 redness

Section 4. First-aid measures

- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
stomach pains
diarrhea

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** : Treat symptomatically and supportively.
- 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. Decontamination measures may be necessary. Personnel and equipment must be checked and decontaminated prior to leaving the area.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Non-flammable. Material will not burn. Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : Do not use water jet. Do not attempt to smother the fire.

Specific hazards arising from the chemical

- : In a fire or if heated, a pressure increase will occur and the container may burst. Not an oxidizer at the manufactured concentration. It may become an oxidizing liquid if concentrated by evaporation. If evaporated to dryness, the product acts as an oxidizing agent, and supports combustion by liberating oxygen even if smothered. Cool containing vessels with flooding quantities of water until well after fire is out. A self contained breathing apparatus should be used to avoid inhalation of toxic fumes. When heated to decomposition it emits toxic fumes (NH₃, NO, NO₂...). Contaminated water can cause environmental damage. Contain and collect water used to fight fire.

Hazardous thermal decomposition products

- : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
ammonia

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. Contain and collect the water used to fight the fire for later treatment and disposal. Dangerous if allowed to dry out. Residue may exhibit oxidizing properties.

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. Avoid breathing vapor or mist. 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 adverse impacts (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. Use appropriate equipment to put the spilled substance in a container for reuse or disposal.
- Large spill** : Shut off all ignition sources. No flares, smoking or flames in hazard area. Stop leak if without risk. Approach release from upwind. Put on appropriate personal protective equipment (see Section 8). Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Use appropriate equipment to put the spilled substance in a container for reuse or disposal. Recycle to process, if possible.
or
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** : Read label before use. Apply this product only as specified on the label. Do not handle until all safety precautions have been read and understood. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Put on appropriate personal protective equipment (see Section 8). Avoid contact with eyes, skin and clothing. Do not ingest. 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.

- 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. Keep from freezing. Do not store below the following temperature: 32°F (0°C). Dangerous if allowed to dry out. Residue may exhibit oxidizing properties. 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

Ingredient name	Exposure limits
ammonium nitrate urea	None. ACGIH TLV (United States, 3/2020). TWA: 10 mg/m ³ , (dust) 8 hours. Form: Inhalable fraction TWA: 3 mg/m ³ , (dust) 8 hours. Form: Respirable fraction AIHA WEEL (United States, 7/2020). TWA: 10 mg/m ³ 8 hours.
ammonium sulfate	None.

Appropriate engineering controls : Ensure any process release discharges in a controlled manner to an approved safe location. Ensure compliance with OSHA 29CFR1910.109 requirements.

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

Contact your personal protective equipment manufacturer to verify the compatibility of the equipment for the intended purpose.

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

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 8. Exposure controls/personal protection

For U.S. work sites where respiratory protection is required, ensure that a respiratory protection program meeting 29 CFR 1910.134 requirements is in place.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: Liquid.
Color	: Red-Brown.
Odor	: Mild.
Odor threshold	: Not available.
pH	: 6 [Conc. (% w/w): 1%]
Melting point/freezing point	: Not available.
Boiling point, initial boiling point, and boiling range	: Not available.
Flash point	: Closed cup: Not applicable. [Product does not sustain combustion.]
Evaporation rate	: Not available.
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: Not available.
Vapor pressure	: Not available.
Relative vapor density	: Not available.
Relative density	: Not available.
Density	: 1.3 g/cm ³ [20°C (68°F)]
Bulk density	: 10.8 lb/gal
Solubility in water	: Miscible in water.
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
<u>Particle characteristics</u>	
Median particle size	: Not applicable.

Section 10. Stability and reactivity

Reactivity	: Not an oxidizer at the manufactured concentration. It may become an oxidizing liquid if concentrated by evaporation. Take any precaution to avoid mixing with combustibles and other incompatible materials.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur. If mixed with chlorine or hypochlorites, it may form nitrogen trichloride which may explode spontaneously in air.

Section 10. Stability and reactivity

Conditions to avoid : Do not allow to dry out. Avoid high temperatures in combination with high pressures. Keep away from heat and direct sunlight. Keep from freezing. Keep away from incompatible materials.

Incompatible materials : Strong acids, nitric acid, strong alkalis, chlorine, hypochlorites, chlorates, metals, zinc, copper, alloys.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced. Burns or explodes when heated to decomposition.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ammonium nitrate	LD50 Oral	Rat	2217 mg/kg	-
urea	LD50 Oral	Rat - Male, Female	14300 mg/kg	-
ammonium sulfate	LD50 Oral	Rat	2840 mg/kg	-

Conclusion/Summary : Low acute toxicity. Nitrate based product. May be irritating to the digestive tract. May cause nausea, vomiting, diarrhea, and abdominal pain. May cause methemoglobinemia (a condition that interferes with the oxygen-carrying capacity of the blood) if ingested in large quantities or over a prolonged period of time. Persons with methemoglobinemia may have blue tinge color to lips, nails, and skin. Also they may have shortness of breath or trouble breathing. Persons more susceptible to methemoglobinemia include: very young (less than 3 months), the elderly, those with chronic obstructive pulmonary disease (COPD), anemia, coronary artery disease, recent surgery or infection, and those with a genetic deficiency of G-6-PD.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ammonium nitrate	Skin - Edema	Rabbit	0	-	72 hours
	Eyes - Edema of the conjunctivae	Rabbit	3	-	3 days
urea	Skin - Edema	Rabbit	0	-	72 hours

Conclusion/Summary

Skin : May cause slight transient irritation.
Eyes : Causes serious eye irritation.
Respiratory : No known significant effects or critical hazards.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
ammonium nitrate	skin	Mouse	Not sensitizing
urea	skin	Mouse	Not sensitizing

Conclusion/Summary

Skin : No known significant effects or critical hazards.
Respiratory : No known significant effects or critical hazards.

Mutagenicity

Section 11. Toxicological information

Product/ingredient name	Test	Experiment	Result
ammonium nitrate	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	OECD 476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
urea	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative

Conclusion/Summary : No known significant effects or critical hazards.

Carcinogenicity

Not available.

Conclusion/Summary : No known significant effects or critical hazards. Potential for nitrosamine formation if ingested. Do not ingest.

Classification

Product/ingredient name	IARC	NTP	ACGIH
ammonium nitrate	2A	-	-

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
ammonium nitrate	Negative	Negative	Negative	Rat - Male, Female	Oral: 1500 mg/ kg	-

Conclusion/Summary : No known significant effects or critical hazards.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
ammonium nitrate	Negative - Oral	Rat - Female	1500 mg/kg	-

Conclusion/Summary : No known significant effects or critical hazards.

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 : Routes of entry anticipated: Oral, Dermal.

Potential acute health effects

Eye contact : Causes eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : May cause slight transient irritation.

Ingestion : Nitrate based product. May be irritating to mouth, throat and stomach. Over-exposure by ingestion is unlikely under normal working conditions.

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

- Eye contact** : Adverse symptoms may include the following:
irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
stomach pains
diarrhea

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

Short term exposure

- Potential immediate effects** : See above.
- Potential delayed effects** : See below.

Long term exposure

- Potential immediate effects** : Methemoglobinemia (see Acute Health Effects).
- Potential delayed effects** : See below.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
ammonium nitrate	Chronic NOAEL Oral	Rat - Male, Female	256 mg/kg	12 months Continuous
urea	Chronic NOAEL Oral	Rat - Male, Female	2250 mg/kg	12 months Continuous

- Conclusion/Summary** : No known significant effects or critical hazards.
- General** : See above.
- Carcinogenicity** : Potential for nitrosamine formation if ingested. Do not ingest.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : 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)
ammonium nitrate	2217	N/A	N/A	N/A	N/A
urea	14300	N/A	N/A	N/A	N/A
ammonium sulfate	2840	N/A	N/A	N/A	N/A

- Other information** : Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ammonium nitrate	NOEC >1700 mg/l	Algae	10 days
	Acute EC50 490 mg/l	Daphnia	48 hours
	Chronic NOEC 6 to 12 mg/l Fresh water	Crustaceans - Cladocera	21 days
urea	Acute EC50 6573.1 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 3910000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 22500 mg/l	Fish - Tilapia - Fry	48 hours
	Chronic NOEC 2 g/L Fresh water	Fish - Heteropneustes fossilis	30 days

Conclusion/Summary : Based on available data, the classification criteria are not met. May be harmful to the environment if released in large quantities. Apply this product only as specified on the label.

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
ammonium nitrate	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
urea	<-1.73	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Read label before use. Apply this product only as specified on the label. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Triple rinse containers with water and add the rinse water to the spray tank. Disposal should be in accordance with applicable regional, national and local laws and regulations. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at <http://www.acrecycle.org/>. Do not contaminate water, food or feed by storage or disposal.

Section 14. Transport information

	TDG	DOT	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-

Section 14. Transport information

Marine pollutant	No.	No.	No.	No.

Additional 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

Canadian lists

Canadian NPRI : The following components are listed: ammonia (total); ammonia (total); Ammonia (total)

CEPA Toxic substances : None of the components are listed.

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.

Inventory list

- Australia** : All components are listed or exempted.
- Canada** : All components are listed or exempted.
- China** : All components are listed or exempted.
- Europe** : All components are listed or exempted.
- Japan** : **Japan inventory (CSCL):** Not determined.
Japan inventory (ISHL): Not determined.
- New Zealand** : All components are listed or exempted.
- Philippines** : All components are listed or exempted.
- Republic of Korea** : All components are listed or exempted.
- Taiwan** : All components are listed or exempted.
- Thailand** : Not determined.
- Turkey** : Not determined.
- United States** : Not determined.
- Viet Nam** : All components are listed or exempted.

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
Clean Water Act (CWA) 307: zinc sulphate, monohydrate; zinc sulfate

Section 15. Regulatory information

Clean Water Act (CWA) 311: iron (II) sulfate (1:1) heptahydrate; zinc sulphate, monohydrate; zinc sulfate; ammonia, anhydrous

- Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed
- DEA List II Chemicals (Essential Chemicals)** : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : EYE IRRITATION - Category 2B

Composition/information on ingredients

Name	%	Classification
ammonium nitrate	25 - 30	OXIDIZING SOLIDS - Category 3 EYE IRRITATION - Category 2A

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	ammonium nitrate	6484-52-2	25 - 30
	ammonium sulfate	7783-20-2	5 - 7
Supplier notification	ammonium nitrate	6484-52-2	25 - 30
	ammonium sulfate	7783-20-2	5 - 7

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 NITRATE; AMMONIUM SULFATE
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: AMMONIUM NITRATE; NITRIC ACID, AMMONIUM SALT
- Pennsylvania** : The following components are listed: NITRIC ACID AMMONIUM SALT; SULFURIC ACID DIAMMONIUM SALT

California Prop. 65

⚠ WARNING: This product can expose you to chemicals including cadmium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Nickel, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Section 16. Other information

History

Date of issue/Date of revision : 3/16/2022

Date of previous issue : 3/16/2022

Version : 1

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
 SGG = Segregation Group
 UN = United Nations

Procedure used to derive the classification

Classification	Justification
EYE IRRITATION - Category 2B	Calculation method

✔ Indicates information that has changed from previously issued version.

Notice to reader

Supply chain partners must ensure they pass this SDS, and all other relevant safety information to their customers.

DISCLAIMER AND LIMITATION OF LIABILITY

The information and recommendations contained in this Safety Data Sheet ("SDS") relate only to the specific material referred to herein (the "Material") and do not relate to the use of such Material in combination with any other material or process. The information and recommendations contained herein are believed to be current and correct as of the date of this SDS. HOWEVER, THE INFORMATION AND RECOMMENDATIONS ARE PRESENTED WITHOUT WARRANTY, REPRESENTATION OR LICENSE OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THEIR ACCURACY, CORRECTNESS OR COMPLETENESS, AND THE SELLER, SUPPLIER AND MANUFACTURER OF THE MATERIAL AND THEIR RESPECTIVE AFFILIATES (COLLECTIVELY, THE "SUPPLIER") DISCLAIM ALL LIABILITY FOR RELIANCE ON SUCH INFORMATION AND RECOMMENDATIONS. This SDS is not a guarantee of safety. A buyer or user of the Material (a "Recipient") is responsible for ensuring that it has all current information necessary to safely use the Material for its specific purpose.

FURTHERMORE, THE RECIPIENT ASSUMES ALL RISK IN CONNECTION WITH THE USE OF THE MATERIAL. THE RECIPIENT ASSUMES ALL RESPONSIBILITY FOR ENSURING THE MATERIAL IS USED IN A SAFE MANNER IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL, HEALTH, SAFETY AND SECURITY LAWS, POLICIES AND GUIDELINES. THE SUPPLIER DOES NOT WARRANT THE MERCHANTABILITY OF THE MATERIAL OR THE FITNESS OF THE MATERIAL FOR ANY PARTICULAR USE AND ASSUMES NO RESPONSIBILITY FOR INJURY OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY OR RELATED TO THE USE OF THE MATERIAL.