• C H E M I C A L •

Issue Date 07/12/2023

Revision Date 07/11/2023

Version 1

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier Product Name	USR: Uratic Salt Remover
Other means of identification Product Code	1020
Recommended use of the chemi	cal and restrictions on use
Recommended use	Uratic Salt Remover
Uses Advised Against	For industrial and institutional use only.
Details of the supplier of the safe	ety data sheet
Company Name	Blue Cardinal Chemical, LLC
	3670 Scarlet Oak Blvd. St. Louis, MO 63122
	800-325-3312
Emergency telephone number	
Emergency Telephone	CHEMTEL 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

Safety data sheet prepared in accordance to the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

Corrosive to metals	Category 1
Flammable Liquids	Category 4
Acute toxicity Inhalation Gas (ppmV)	Category 3
Acute toxicity Oral	Category 3
Serious Eye Damage	Category 1
Skin Corrosion	Category 1
Specific Target Organ Toxicity	Category 3

Label elements

Emergency Overview

DANGER

Hazard statements

Toxic if inhaled. Toxic if swallowed. Causes severe skin burns and eye damage. May cause respiratory irritation.



Appearance: White Liquid



Physical state: Liquid

Odor: Strong Acid

Precautionary Statements - Prevention

May be corrosive to metals. Combustible Liquid. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Keep only in original packaging. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves, protective clothing, eye protection/face protection. Do not breathe dust/fume/gas/ mist/vapors/spray. Keep container tightly closed.

Precautionary Statements - Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Specific treatment (see First-Aid on this label). IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Absorb spillage to prevent material damage. In case of fire: Use carbon-dioxide, alcohol foam, water spray or dry chemical to extinguish. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Call a POISON CENTER/doctor if you feel unwell.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in a corrosive resistant container with a resistant inner liner. Store in a well-ventilated place. Store in a well-ventilated place. Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local/national/international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO.	WEIGHT - %	TRADE SECRET
HYDROCHLORIC ACID	0007647-01-0	19% - 32%	*
ETHYLENE GLYCOL MONOBUTYL ETHER	0000111-76-2	0.10% - 2%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4	I. FIRST AID MEASURES
First aid measures	
Skin Contact	Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with lukewarm, gently flowing water/shower for a duration of 30 minutes or until medical aid is available. Immediately call a POISON CENTER or doctor. Store contaminated clothing under water and wash before re-use or discard.
Eye Contact	Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 30 minutes or until medical aid is available. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a POISON CENTER or doctor.
Inhalation	Remove source of exposure or move person to fresh air and keep comfortable for breathing. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor. Immediately call a POISON CENTER or doctor. Eliminate all ignition sources if safe to do so. Take precautions to ensure your own safety (e.g. wear appropriate protective equipment)
Ingestion	Immediately call a POISON CENTER or doctor. Rinse mouth. If breathing has stopped, immediately start cardiopulmonary resuscitation (CPR) or automated external defibrillation (AED). Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.
Most important symptoms and effect, both acu	te and delayed

Symptoms No data available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat according to symptoms (decontamination, vital functions), no known specific antidote. Treatment should be supportive and based on the judgment of the physician in response to the reaction of the patient.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire : Water spray, fog or alcohol-resistant foam.

Unsuitable extinguishing media: Do not use straight stream of water.

Specific hazards in Case of Fire

Fire will produce irritating, toxic and corrosive gases. Containers may explode in fire. Most vapors are heavier than air. Vapors may form explosive mixtures with air Vapors will spread along ground and collect in low or confined areas (sewers, basements, tanks) Vapors may travel to source of ignition and flash back. Many liquids are lighter than water. May form an ignitable vapor/air mixture in closed tanks or containers.

Protective equipment and precautions for firefighters

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear. Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA). Breathing protection is required. Do not breathe vapor or mist. Do not get on skin, eyes or clothing.
Environmental precautions	
Environmental precautions	Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Dike far ahead of liquid spill for later disposal.
Methods and material for containment and cle	eaning up
Methods for containment & cleaning up	Ventilate area after clean-up is complete. Absorb or cover with dry earth, sand or other

Emergency Procedure

Evacuate and isolate hazard area and keep unauthorized personnel away. Stay uphill and/or upstream. Ventilate closed spaces before entering. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. A vapor-suppressing foam may be used to reduce vapors.

collect absorbed material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Wash hands after use. Do not breathe vapor or mist. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. All containers must be properly labeled. Eyewash stations and showers should be available in areas where this material is used and stored ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not get in eyes, on skin, or on clothing.

non-combustible material and transfer to containers. Use clean, non-sparking tools to

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous. Store in approved containers and protect against physical damage. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and strong oxidizers. Take precautionary measures against electrostatic discharge. To avoid fire or explosion, dissipate static electricity during transfer by ground and bonding containers and equipment before transferring material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

CHEMICAL NAME	ACGIH TWA (ppm)	ACGIH STEL (ppm)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA Skin designation	OSHA Tables (Z1, Z2, Z3)	NIOSH TWA (mg/ m3)	NIOSH TWA (ppm)
ETHYLENE GLYCOL MONOBUTYL ETHER	20		A3	Eye & URT irr	A3; BEI	240	50	1	1	24	5
HYDROCHLORIC ACID		C 2	A4	URT irr	A4	7 ceiling	5 ceiling		1		

(C) - Ceiling limit, A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, irr - Irritation, URT - Upper respiratory tract

Appropriate engineering controls

Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids.
Skin and body protection	Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.
Respiratory protection	If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Color Odor	Liquid White Liquid White Strong Acid N/D
Property_	<u>Values</u>
Specific Gravity % VOC Density VOC % HAPS 0.00% Density HAPS % VHAPS Density VHAPS I % Solids By Weight Density pH Water Solubility Flammability Flash Point Symbol Flash Point Symbol Flash Point Viscosity Kinematic Viscosity Odor Threshold Lower Explosion Level Upper Explosion Level Upper Explosion Level Refractive Index Vapor Pressure Vapor Density Kinematic Viscosity Temperature Freezing Point Melting Point Low Boiling Point	1.14 0.00% 0.00 lb/gal 0.00% 0.00 lb/gal 0.00% 0.00 lb/gal 0.00% 9.51 lb/gal 2.00 N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A
Auto Ignition Temp Decomposition Pt Evaporation Rate	N/A N/A N/A N/A N/A

10.STABILITY AND REACTIVITY

Chemical Stability

Stable under normal storage and handling conditions.

Possibility Of Hazardous Reactions

Will not occur.

Conditions To Avoid

Avoid all possible sources of ignition, heat, sparks, flame, build up of static electricity and contact with incompatible materials.

Incompatible Materials

Strong bases, acids, and oxidizing agents. Corrosive in contact with metals

Hazardous Decomposition Products

Oxides of carbon.

11.TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation, Ingestion, Skin contact, Eye contact

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

0007647-01-0 HYDROCHLORIC ACID Serious local effects by all routes of exposure. The substance can be absorbed into the body by inhalation.

Product Information

Eye Contact	Causes serious eye damage 0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER Can irritate the eyes. Can irritate the skin. 0007647-01-0 HYDROCHLORIC ACID Hydrochloric acid solutions is considered to cause severe eye damage from concentrations of 1% and higher.
Skin Contact	Causes severe skin burns and eye damage 0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER Can irritate the skin. May affect the central nervous system, blood, kidneys and liver. Exposure can cause headache, dizziness and lighheadedness. 0007647-01-0 HYDROCHLORIC ACID Hydrochloric acid solutions are corrosive to the skin from 10%.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Respiratory/Skin Sensitization Germ Cell Mutagenicity	Based on available data, the classification criteria are not met. 0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER Can irritate the eyes. Can irritate the respiratory tract. Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met. 0007647-01-0 HYDROCHLORIC ACID Mists of this strong inorganic acid may be carcinogenic to humans.
Reproductive Toxicity	Based on available data, the classification criteria are not met. 0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER Can irritate the respiratory tract.
STOT - Single Exposure	May cause respiratory irritation 0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER May affect the central nervous system, blood, kidneys and liver. Exposure can cause headache, dizziness and lighheadedness.
STOT - Repeated Exposure	Based on available data, the classification criteria are not met. 0007647-01-0 HYDROCHLORIC ACID The substance may have effects on the upper respiratory trach and lungs resulting in chronic inflammation of the respiratory tract and reduced lung function. Repeated or prolonged inhalation may cause effects on the teeth which may result in tooth erosion.
Aspiration Hazard	Based on available data, the classification criteria are not met.

Numerical measures of toxicity - Product Information

Acute ToxicityToxic if inhaled. Toxic if swallowed.The following values are calculated based on chapter 3.1 of the GHS document.ATEmix (oral)293.255 mg/kg body weightATEmix (dermal)>5000 mg/kg body weightATEmix (inhalation-vapor)>20 mg/

0007647-01-0 HYDROCHLORIC ACID: Rapid evaporation of the liquid may cause frostbite. Inhalation of high concentrations of the gas may cause pneumonitis and lung oedema (after initial corrosive effects on the eyes and the upper respiratory tract have become manifest) resulting in reactive airways dysfunction syndrome (RADS). Exposure could cause asphyxiation due to swelling in the throat.

Potential Health Effects - Miscellaneous

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER Can be absorbed through the skin in harmful amounts. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

USR: URATIC SALT REMOVER

REVISION DATE 11-JUL-2023

CHEMICAL NAME	ORAL LD50	DERMAL LD50	INHALATION LC50
HYDROCHLORIC ACID (0007647-01-0)	(oral, rabbit): 900 mg/kg (5)		(rat): 8300 mg/m3 (5666 ppm) (30-minute exposure) (2) (rat): 45600 mg/m3 (31008 ppm) (5-minute exposure) (2) (mouse): 3100 mg/m3 (2142 ppm) (30-minute exposure) (2) (mouse): 16500 mg/m3 (11238 ppm) (5-minute exposure) (2)
ETHYLENE GLYCOL MONOBUTYL ETHER (00001111-76-2)	(oral, male weanling rat): 3000 mg/kg (1) (oral, 6-week old male rat): 2400 mg/kg (1) (oral, yearling male rat): 560 mg/kg (1) (oral, female rat): 530 mg/kg; 2500 mg/kg (1) (oral, male mouse): 1230 mg/kg (1) (oral, rabbit): 320 mg/kg (1)	(dermal, male rabbit): 406 mg/ kg (cited as 0.45 mL/kg) (1)	(female rat): 450 ppm (4-hour exposure) (2) (male rat): 486 ppm (4-hour exposure) (2)

12. ECOLOGICAL INFORMATION

Toxicity

Based on available data, the classification criteria are not met.

Persistence And Degradability

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER Readily biodegradable. Readily biodegradable.

Bioaccumulation

No data available.

Mobility in Soil No data available.

No data available.

Other Adverse Effects

No data available.

Results of the PBT and vPvB assessment

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER The substance is not PBT / vPvB.

0007647-01-0 HYDROCHLORIC ACID

The substance is not PBT / vPvB.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT

UN/ID No.	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (Ethylene Glycol Monobutyl Ether, Hydrochloric Acid)
Hazard Class	8
Packing Group	III
Marine Pollutant	N/A

<u>IATA</u>

UN/ID No.	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (Ethylene Glycol Monobutyl Ether, Hydrochloric Acid)
Hazard Class	8
Packing Group	III
Marine Pollutant	N/A

15. REGULATORY INFORMATION

CHEMICAL NAME	CAS NO. WEIGHT - %		Regulation List	
HYDROCHLORIC ACID	0007647-01-0	19% - 32%	SARA313, DHS_COI - DHS_Chemical Of Interest, DSL, CERCLA, EHS, HAPS, SARA312, IARCCarcinogen, TSCA, NEI - National Emissions Inventory, , MA_RightToKnow - MASSACHUSETTS RIGHT TO KNOW	
ETHYLENE GLYCOL MONOBUTYL ETHER	0000111-76-2	0.10% - 2%	SARA313, DSL, CERCLA, SARA312, IARCCarcinogen, TSCA, NEI - National Emissions Inventory, , MA_RightToKnow - MASSACHUSETTS RIGHT TO KNOW	

US State Regulations

California Proposition 65

Product does not contain any chemicals listed under California Proposition 65

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards	3	Flammability	0	Physical Hazard		Other	
<u>HMIS</u>	Health hazards	3	Flammability	0	Physical Hazard	1	Personal protection	

Issue Date	07/12/2023			
Revision Date	07/11/2023			
Revision Note				

N/A = Not Applicable; N/D = Not Determined

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

(*) - Chronic effects

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

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet