

# SAFETY DATA SHEET

Conforms to HazCom 2012/United States

## Section 1. Identification

**Product Identifier:** D-Mineralizer  
**Other Means of Identification:** Organic Acid Salt  
**Product Type:** Liquid  
**Recommended Uses:** Acid Replacement  
**Restrictions on use:** Do not use with chlorates, nitrates, hypochlorites or alkaline materials.

**Supplier's Details:** Wayne Concept  
5005 Speedway Drive  
Fort Wayne, IN 46825  
Tel: (260) 482-8615  
Fax: (260)483-5598

**Emergency Telephone:  
Number** INFOTRAC: (800) 535-5053

## 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** CORROSIVE TO METALS – Category 1  
SERIOUS EYE DAMAGE/EYE IRRITATION – Category 1  
ACUTE TOXICITY – Category 4

**GHS Label Elements**  
**Hazard pictograms:**



**Signal Word:** Danger  
**Hazard Statements:** May be Corrosive to Metals  
Causes Serious Eye Damage  
Harmful if Swallowed

**Precautionary Statements**  
**Prevention:**

Keep in original container.  
Wear eye or face protection.  
Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product.

- Response:** Absorb spillage to prevent material damage.  
 IF SWALLOWED: Call a Poison Center or a doctor/physician if you feel unwell. Rinse mouth.  
 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/physician.
- Storage:** Store in corrosive resistant containers such as fiberglass, polyethylene, polypropylene or containers with a resistant inner liner.
- Disposal:** Dispose of contents/container in accordance with local/regional/national/international regulations.
- Hazards Not Otherwise Classified:** None Known

### Section 3. Composition/Information on Ingredients

**Substance/mixture:** Mixture

Chemical Name	%	CAS Number
Urea Monohydrochloride	20-40	506-89-8

The exact percentage of the composition has been withheld as it is a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

### 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 20 minutes. Get medical attention.
- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.
- Skin Contact:** Flush contaminated skin with plenty of water. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion:** Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most Important Symptoms/Effects, Acute and Delayed****Potential Acute Health Effects**

<b>Eye Contact:</b>	Causes serious eye damage
<b>Inhalation:</b>	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<b>Skin Contact:</b>	Causes mild skin irritation
<b>Ingestion:</b>	Harmful if swallowed. Irritating to mouth, throat and stomach

**Over Exposure Signs/Symptoms**

<b>Eye Contact:</b>	Adverse symptoms may include the following: Pain or irritation Watering Redness
<b>Inhalation:</b>	No known significant effects or critical hazards.
<b>Skin Contact:</b>	Adverse symptoms may include the following: Irritation Redness
<b>Ingestion:</b>	Harmful if swallowed. Irritating to mouth, throat and stomach

**Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary**

<b>Notes to Physician:</b>	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.
<b>Specific Treatments:</b>	No specific treatment
<b>Protection of First Aiders:</b>	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.

**Section 5. Fire-Fighting Measures****Extinguishing Media**

<b>Suitable extinguishing media</b>	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	None known

**Specific Hazards Arising from the chemical** At temperatures above 60°C/140°F acid action on most metals may release hydrogen, a highly flammable and explosive gas.

<b>Hazardous thermal decomposition products</b>	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides hydrochloric acid
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**Special protective actions for fire-fighters** No special measures are required.

**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. 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 environmental pollution (sewers, waterways, soil or air).

### Methods and Materials for Containment and Cleaning Up

**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). Do not ingest. Avoid contact with eyes, skin and clothing. 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. 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.

## Section 8. Exposure Controls/ Personal Protection

### Control Parameters

**Occupational Exposure:  
Limits** None

**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.

### Individual Protection Measures

**Hygiene Measures:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/Face Protection:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### Skin Protection

**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:** Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and Chemical Properties

### Appearance

**Physical State:** Liquid. [Clear]  
**Color:** Yellow  
**Odor:** Not available

<b>Odor Threshold:</b>	Not available
<b>pH:</b>	0.8 (+- 0.5) (1:128 is 2.2)
<b>Melting/Freezing Point:</b>	< -30°C
<b>Boiling Point/Range:</b>	100°C (212°F)
<b>Flash Point:</b>	>93.3°C (>200°F)
<b>Evaporation Rate:</b>	>1 (Butyl acetate = 1)
<b>Flammability (solid, gas):</b>	Not available
<b>Lower and Upper Explosive: (flammable) Limits</b>	Not available
<b>Vapor Pressure:</b>	<0.013kPa (<0.1mmHg) [room temperature]
<b>Vapor Density:</b>	>1 [Air = 1]
<b>Relative Density:</b>	9.085 lbs/gal
<b>Solubility:</b>	Easily soluble in the following materials: water
<b>Partition Coefficient: n-octanol/water</b>	Not available
<b>Auto-Ignition Temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available
<b>Viscosity:</b>	Not available

## Section 10. Stability and Reactivity

<b>Reactivity:</b>	No specific test data related to reactivity available for this product or its ingredients
<b>Chemical Stability:</b>	The product is stable
<b>Possibility of Hazardous: reactions</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to Avoid:</b>	No specific data.
<b>Incompatible Materials:</b>	Reactive or incompatible with the following materials: oxidizing materials. This material may be extremely hazardous in contact with chlorates and nitrates. Contact with hypochlorites (eg. Chlorine bleach, sulfides or cyanides) will liberate toxic gases. Contact with alkaline materials (eg. Aqua ammonia) will generate heat.
<b>Hazardous Decomposition: products</b>	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
Urea Monohydrochloride	LD50 Oral	rat	1120.9 mg/kg	-

#### Irritation/Corrosion

Mild skin irritant (OECD 404)

Eye corrosive (OECD 405)

**Sensitization**

There is no data available

**Carcinogenicity**

No components are listed as carcinogens by IARC, ACGIH, OSHA or NTP.

**Specific Target Organ Toxicity (single exposure)**

There is no data available

**Specific Target Organ Toxicity (repeated exposure)**

There is no data available

**Aspiration Hazard**

There is no data available

**Information on the likely:** Dermal contact. Eye contact. Inhalation. Ingestion.  
**routes of exposure**

**Potential Acute Health Effects**

**Eye contact:** Causes serious eye damage  
**Inhalation:** Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
**Skin Contact:** Causes mild skin irritation.  
**Ingestion:** Irritating to mouth, throat and stomach.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye Contact:** Adverse symptoms may include the following:  
Pain or irritation  
Watering  
Redness  
**Inhalation:** No known significant effects or critical hazards.  
**Skin Contact:** Adverse symptoms may include the following:  
irritation  
redness  
**Ingestion:** No known significant effects or critical hazards.

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

**Potential immediate effects:** No known significant effects or critical hazards.

**Potential delayed effects:** No known significant effects or critical hazards.

**Long term exposure**

**Potential immediate effects:** No known significant effects or critical hazards.

**Potential delayed effects:** No known significant effects or critical hazards.

**Potential chronic health effects**

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

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

**Mutagenicity:** Not Mutagenic (OECD 471)

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

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

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

**Numerical measures of toxicity**

**Acute toxicity estimates** There is no data available.

## Section 12. Ecological Information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Urea Monohydrochloride	Acute LC50 71mg/L	Ceriodaphnia dubia	48 hours
Urea Monohydrochloride	Acute LC0 >142mg/L	Rainbow trout	96 hours

**Persistence and Degradability:** There is no data available

**Bioaccumulative Potential:** There is no data 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 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 empty 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	TDG	IMDG	IATA
<b>UN Number</b>	Not regulated	1760	1760	1760
<b>UN Proper Shipping Name</b>	-	Corrosive liquid N.O.S. (urea monohydrochloride)	Corrosive liquid N.O.S. (urea monohydrochloride)	Corrosive liquid N.O.S. (urea monohydrochloride)
<b>Transport Hazard Class(es)</b>	-	8	8	8
<b>Packing Group</b>	-	III	III	III
<b>Environmental Hazards</b>	No	No	No	No
<b>Additional Information</b>	Exempt under DOT 49 CFR 173.154 (d). This material is corrosive to aluminum only. Not corrosive to mild steel and skin	This material is corrosive to aluminum only. Not corrosive to mild steel and skin	This material is corrosive to aluminum only. Not corrosive to mild steel and skin	This material is corrosive to aluminum only. Not corrosive to mild steel and skin

**Transport in bulk according:** Not available

**To Annex II of MARPOL 73/78 and the IBC Code**



**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):** All components are listed or exempted

**Clean Air Act Section 112:** Not listed

**(b) Hazardous Air Pollutants (HAPS)**

**Clean Air Act Section 602:** Not listed

**Class I Substances**

**Clean Air Act Section 602:** Not listed

**Class II Substances**

**DEA List I Chemicals:** Not listed

**(Precursor Chemicals)**

**DEA List II Chemicals:** Not listed

**(Essential Chemicals)**

### SARA 302/304

#### Composition/Information on Ingredients

Not listed

### SARA 311/312

**Classification:** Immediate (acute) health hazard

#### Composition/Information on Ingredients

Name	%	Fire Hazard	Sudden Release of Pressure	Reactive	Immediate (acute) Health Hazard	Delayed (chronic) Health Hazard
Urea Monohydrochloride	50-100	No	No	No	Yes	No

### International Lists

#### National Inventory

**Australia (AICS):** All components are listed or exempted.

**Canada (DSL):** All components are listed or exempted.

**China (IECSC):** All components are listed or exempted.

**Europe (EINECS):** All components are listed or exempted.

**Japan (ENCS):** All components are listed or exempted.

**New Zealand (NZIoC):** All components are listed or exempted.

**Philippines (PICCS):** All components are listed or exempted.

**Republic of Korea (KECL):** All components are listed or exempted.

**Taiwan (NECI):** All components are listed or exempted.

## Section 16. Other Information

### History

Date of issue mm/dd/yyyy: 05/11/15

Prepared by: Wayne Concept

### 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 guarantee that these are the only hazards that exist.

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