SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

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: """"Hilst 'Kovgt pcylqpen

Emergency Telephone:

Number

SECTION 2: Hazards identification

This material is considered hazardous by the OSHA GHS Hazard Communication Standard (29CFR1910.1200).

Classification of the Corrosive to Metals - Category 1

substance or mixture: Eye Damage - H318 Causes serious eye damage/Irritation Category 1

Acute Toxicity - Category 1

GHS Label Elements
Hazard Pictograms





GS05

GHS07

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 damage

If SWALLOWED: Call a Poison Center or a doctor/physician if you fell unwell.

Rinse mouth

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do so. Continue rinsing. Immediately call a Poison Center or

doctor/physician.

Trade name:

Storage: Store in corrosive resistant containers such as fiberglass, polyethylene, polypropylene or containers with

resistant inner liner.

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

Hazards Not: None Known

Otherwise Classified

SECTION 3: Composition/information on ingredients

Substance/Mixture: Mixture

Chemical Name	%	CAS Number	
W M 1 1 11 11	.(0	707 00 0	
Proprietary Inhibitor	30	No Data	

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

4.1 Description of first aid measures

Eye Contact: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If

symptoms persist, consult a doctor.

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

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, 'I kag 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 "gHgew 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.

Trade name:

Most Important Symptons/Effects, Acute and Delayed

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: Harmful if swallowed. Irritating to mouth, throat and stomach

Over Exposure Signs/Symptoms

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: Harmful if swallowed. Irritating to mouth, throat and stomach

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. It may be

dangerous to the person providing aid to give mouth-to-mouth resuscitation.

SECTION 5: Fire-Fighting Measures

Extinguishing Media

Suitable extinguishing: Use an extinguishing agent suitable for the surrounding fire.

Media

Unsuitable extinguishing: None known

media

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.

Hazardous thermal: Decomposition products may include the following materials:

decomposition products carbon dioxide

carbon monoxide nitrogen oxides hydrochloric acid

Special protective actions: No special measures are required.

for fire-fighters

Special protective: Fire-fighters should wear appropriate protective equipment and self-contained breathing

equipment for fire-fighters apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Trade name:

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

For non-emergency: No action shall be taken involving any personal risk or without suitable training. Keep

Personnel 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

posal 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: Eating, drinking and smoking should be prohibited in areas where this material is

occupational hygiene 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

dis-

Trade name:

SECTION 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure: None

Limits

Appropriate Engineering:

Controls

Good general ventilation should be sufficient to control worker exposure to airborne

contaminants.

Emissions from ventilation or work process equipment should be checked to ensure Controls **Environmental Exposure:**

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 **Odor Threshold:** Not available

Trade name:

pH: 0.7 typical [as is]

Melting/Freezing Point: < -30°C

Boiling Point/Range: 100°C (212°F) **Flash Point:** >93.3°C (>200°F) **Evaporation Rate:** >1 (Butyl acetate = 1)

Flammability (solid, gas): Not available Lower and Upper Explosive: Not available

(flammable) Limits

Vapor Pressure: <0.013kPa (<0.1mmHg) [room temperature]

Vapor Density: >1 [Air = 1]

Relative Density: 1.21 +/- 0.2

Solubility: Easily soluble in the following materials: water

Partition Coefficient: Not available

n-octanol/water

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: 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.

Hazardous Decomposition: Under normal conditions of storage and use, hazardous decomposition products

products should not be produce

SECTION 11: Toxicological Information

Information on toxicological effects

Acute toxicity

Product/Ingredient Name

Irritation/Corrosion

Mild skin irritant (OECD 404) Eye corrosive (OECD 405)

Trade name:

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

Eve 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. 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.

No known significant effects or critical hazard.

No known significant effects or critical hazard

Numerical measures of toxicity

Acute toxicity estimates There is no data available.

Trade name:

SECTION 12: Toxicological Information

Toxicity

Product/ingredient name	Result	Species	Exposure	
BJSI	Acute LC50 71mg/L	Ceriodaphnia dubia	48 hours	
BJSI	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: Not available

(Koc)

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

	<u> </u>		t	t
	DOT	TDG	IMDG	IATA
UN Number	Not regulated	1760	1760 1	760
UN Proper		Corrosive liquid	Corrosive liquid Co	rrosive liquid
Shipping Name	- N.O.	S. (urea N.O.	S. (urea N.O.S. (u	rea
		monohydrochloride)	monohydrochloride) m	onohydrochloride)
Transport Hazard Class(es)	-	8	8	8
Packing Group		Ш	l III I	 TT
Environmental	-	111	1111 1	11
Hazards	No	No	No	No
Additional				
Information	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 corros mild steel and skin	This material is corrosive to aluminum only. Not ive to mild steel corrosive to mild and skin	This material is corrosive to aluminum only. Not steel and skin

Transport in bulk according: Not available

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

Trade name:

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 (acu		delayed Onic) Health Hazard
Urea Monohydrochloride	0-100	No	No	No	Yes	No

International Lists

National Inventory

Australia (AICS):

Canada (DSL):

All components are listed or exempted.

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):

Philippines (PICCS):

Republic of Korea (KECL):

Taiwan (NECI):

All components are listed or exempted.

All components are listed or exempted.

All components are listed or exempted.

Trade name:

SECTION 15: Regulatory Information

History

Date of issue mm/dd/yyyy: 02/24/2015
Date of previous issue: None

Version: 1

Revised Section(s): Not applicable

Prepared by:

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