Catalynt Solutions,Inc.
240 Foster Avenue
Bensenville, IL, USA, 60106
Telephone: (630) 521 1600

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SECTION 1. IDENTIFICATION

Product identifier used on the label

: **Urea Hydrochloride Solution, 40%**

Other means of identification : Not available.

Recommended use of the chemical and restrictions on use

: Industrial Cleaning & Descaling, Safe Acid Substitute, Metalworking & Treatment
Use pattern: Professional Use Only
Recommended restrictions: No restrictions on use known.

Chemical family : Mixture

Name, address, and telephone number of the supplier:

Catalynt Solutions,Inc.

240 Foster Avenue
Bensenville, IL, USA
60106

Name, address, and telephone number of the manufacturer:

Refer to supplier

Supplier's Telephone # : (630) 521 1600

24 Hr. Emergency Tel # : INFOTRAC: (800) 535-5053 (US and Canada); + 001 (352) 323-3500 (International)
Contract No.: 79932

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Most important hazards: Corrosive to all tissues. May be corrosive to metals. May cause respiratory irritation. Occupational exposure to the substance or mixture may cause adverse effects. Refer also to TOXICOLOGICAL INFORMATION (Section 11).

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) and Canadian WHMIS regulations (Hazardous Products Regulations) .

Hazard classification:
Corrosive to Metals - Category 1
Acute toxicity, oral - Category 4
Acute Toxicity (Inhalation) - Category 4
Skin corrosion - Category 1
Eye Damage - Category 1
Specific target organ toxicity, single exposure - Category 3 (respiratory)

Label elements

Hazard pictogram(s)

Signal Word

Danger

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Hazard statement(s)

May be corrosive to metals.
Harmful if swallowed.
Harmful if inhaled.
Causes severe skin burns and eye damage.
May cause respiratory irritation.

Precautionary statement(s)

Keep only in original packaging.
Do not breathe mists.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves,clothing and eye,face protection.

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.
Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Absorb spillage to prevent material-damage.

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

Dispose of contents or container in accordance with local regulation.

Other hazards

Other hazards which do not result in classification:
Contact with most metals will generate flammable hydrogen gas. Contact with water gives off heat. Burning produces obnoxious and toxic fumes. Chronic skin contact with low concentrations may cause dermatitis.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	Common name and synonyms	CAS #	Concentration (% by weight)
Hydrochloric Acid	Muriatic acid	7647-01-0	**55.0 - 65.0**
Urea	Not available	57-13-6	**35.0 - 45.0**

The exact concentrations of the above listed chemicals are being withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

Ingestion : Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Have victim rinse mouth with water, then give one to two glasses of water to drink. Seek immediate medical attention/advice.

Inhalation : Immediately remove person to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing has stopped, give artificial respiration. Seek immediate medical attention/advice.

Skin contact : Wear appropriate protective equipment. Remove/Take off immediately all contaminated clothing. Immediately flush skin with gently flowing, running water for at least 20 minutes. Do not rub area of contact. Obtain medical attention immediately. Wash contaminated clothing before reuse. Contaminated leather may require disposal.

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Eye contact : Wear appropriate protective equipment. Protect unharmed eye. If in contact with eyes, immediately flush eyes with running water for at least 20 minutes. If contact lens is present, DO NOT delay flushing or attempt to remove the lens until flushing is done. Obtain medical attention immediately.

Most important symptoms and effects, both acute and delayed

: Causes severe skin irritation. Symptoms may include redness, blistering, pain and swelling. Causes serious eye damage. Symptoms may include severe pain, blurred vision, redness and corrosive damage. May cause respiratory irritation. Symptoms may include coughing, choking and wheezing. Could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed. Ingestion may cause severe burns to the mucous membranes of the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations and bleeding.

Indication of any immediate medical attention and special treatment needed

: Immediate medical attention is required. Causes chemical burns. Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

: Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical. May react with water. Use water spray with caution.

Unsuitable extinguishing media

: Use water spray with caution. Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability

: Not considered flammable. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Contact with metals liberates hydrogen gas. Contact with water gives off heat.

Flammability classification (OSHA 29 CFR 1910.106)

: Not flammable.

Hazardous combustion products

: Hydrogen chloride.

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Do not enter without wearing specialized protective equipment suitable for the situation. Firefighter's normal protective clothing (Bunker Gear) will not provide adequate protection. A full-body encapsulating chemical protective suit with positive pressure self-contained breathing apparatus (NIOSH approved or equivalent) may be necessary.

Special fire-fighting procedures

: Move containers from fire area if safe to do so. Use water to cool fire-exposed containers. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply or any natural waterway. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

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Environmental precautions : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.

Methods and material for containment and cleaning up

: Remove all sources of ignition. Ventilate area of release. Stop the spill at source if it is safe to do so. Contain and absorb spilled liquid with inert, non-combustible absorbent material (e.g. sand, vermiculite), then place material into open, unsealed containers.Notify the appropriate authorities as required.

Special spill response procedures

: If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the National Response Center in the United States (phone: 1-800-424-8802).
In Canada: For 24-hour emergency assistance, call: 1-613-996-6666 (CANUTEC).

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Wear protective gloves,clothing and eye,face protection. Use only in well-ventilated areas. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment. Do not breathe mist. Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling. Keep away from heat and flame. Keep away from incompatibles. May react with water, generating heat. When diluting, always add the product to water. Never add water to the product. When mixing with water, stir small amounts in slowly. Keep containers tightly closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Conditions for safe storage : Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep away from incompatibles.Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Do not freeze. Store in corrosion-resistant containers. Avoid contact with aluminum.

Incompatible materials : Bases.; Water; Metals (e.g. tin, aluminum, zinc and alloys containing these metals); Halogenated compounds; Nitrogen compounds.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

Chemical Name	ACGIH TLV		OSHA PEL	
	TWA	STEL	PEL	STEL
Urea	10 mg/m³ (AIHA WEEL)	Not available	Not available	Not available
Hydrochloric Acid	2ppm	Not available	5ppm; 7mg/m³	Not available

Exposure controls

Ventilation and engineering measures

: Use only in well-ventilated areas. Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.

Respiratory protection : Respiratory protection is required if the concentrations exceed the TLV. NIOSH-approved respirators are recommended. A self contained breathing apparatus should be used in emergency situations or instances where exposure levels are not known. Seek advice from respiratory protection specialists. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA standard.

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Skin protection	:	Impervious gloves must be worn when using this product. Advice should be sought from glove suppliers. Wear as appropriate: Neoprene; Polyvinylchloride; Viton; Butyl rubber; Nitrile rubber; Polyethylene. Unsuitable material: polyvinyl alcohol. Wear chemically protective gloves (impervious), boots, aprons, and gauntlets to prevent prolonged or repeated skin contact.
Eye / face protection	:	Chemical splash goggles must be worn when handling this material. A full face shield may also be necessary.
Other protective equipment	:	An eyewash station and safety shower should be made available in the immediate working area. Other equipment may be required depending on workplace standards.
General hygiene considerations	:	Do not breathe mist. Do not ingest. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Liquid.
Colour	:	Clear, colorless.
Odour	:	Characteristic
Odour threshold	:	Not applicable.
pH	:	0
Melting Point/Freezing point	:	Not available
Initial boiling point and boiling range	:	Not available
Flash point	:	Not applicable.
Flashpoint (Method)	:	Not applicable.
Evaporation rate (BuAe = 1)	:	Not available
Flammability	:	Not applicable.
Lower explosion or flammability limit (% by vol.)	:	Not applicable.
Upper explosion or flammability limit (% by vol.)	:	Not applicable.
Oxidizing properties	:	None known.
Explosive properties	:	Not explosive
Vapour pressure	:	Not available
Relative vapour density	:	Not available.
Relative density / Specific gravity	:	1.21 (10.1 lbs/gal)
Solubility in water	:	Very soluble
Other solubility(ies)	:	Not available.
Partition coefficient: n-octanol/water or Coefficient of water/oil distribution	:	Not available.
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not available.
Viscosity	:	Not available
Particle characteristics	:	Not available
Volatiles (% by weight)	:	Not available.
Volatile organic Compounds (VOC's)	:	Not available.
Absolute pressure of container	:	Not applicable.

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Flame projection length : Not applicable.
Other physical/chemical comments
: Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive. May be corrosive to metals. Contact with most metals will generate flammable hydrogen gas. Contact with water will generate considerable heat.
Chemical stability : Material is stable under normal conditions.
Possibility of hazardous reactions
: Hazardous polymerization does not occur.
Conditions to avoid : Avoid heat and open flame. Keep away from incompatibles. Keep container tightly closed when not in use. Avoid contact with water.
Incompatible materials : Water; Bases.; Metals (e.g. tin, aluminum, zinc and alloys containing these metals); Halogenated compounds; Nitrogen compounds.
Hazardous decomposition products
: Hydrogen chloride.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES
Routes of entry skin & eye : YES
Routes of entry Ingestion : YES
Routes of exposure skin absorption
: YES

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation
: Harmful if inhaled. May cause severe irritation to the nose, throat and respiratory tract. Symptoms may include coughing, choking and wheezing. Could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed.

Sign and symptoms ingestion
: Harmful if swallowed. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforations, bleeding and eventually death.

Sign and symptoms skin : Causes severe skin burns.Symptoms may include blistering, ulcerations and scarring.
Sign and symptoms eyes : Causes serious eye damage.Symptoms may include severe pain, tearing, redness, swelling and blurred vision.Permanent eye damage including blindness could result.

Potential Chronic Health Effects
: Chronic skin contact with low concentrations may cause dermatitis.
Mutagenicity : Not expected to be mutagenic in humans.
Carcinogenicity : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
Reproductive effects & Teratogenicity
: Not expected to have other reproductive effects.
Sensitization to material : Not expected to be a skin or respiratory sensitizer.
Specific target organ effects : May cause respiratory irritation.
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

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Medical conditions aggravated by overexposure
: Not available.

Synergistic materials : Not available.

Toxicological data : There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data. The calculated ATE values for this mixture are:
ATE inhalation (mists) = 4.4 mg/L
ATE oral = 1259.25 mg/kg

Chemical name	LC_{50}(4hr) inh, rat	LD_{50} (Oral, rat)	LD_{50} (Rabbit, dermal)
Urea	Not available	8471 mg/kg	>21000 mg/kg
Hydrochloric Acid	1.68 1h	238-277 mg/kg rat	>5010 mg/kg rabbit

Other important toxicological hazards
: Not applicable

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity : The ecological characteristics of this product have not been fully investigated.
The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
Toxicity is primarily associated with pH.

Ecotoxicity data:

Ingredients	CAS #	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Urea	57-13-6	Not available	Not available	Not available
Hydrochloric Acid	7647-01-0	4.92 mg/L (Cyprinus carpio)	Not available	None.

Ingredients	CAS #	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Urea	57-13-6	Not available	Not available	Not available
Hydrochloric Acid	7647-01-0	Not available	Not available	None.

Ingredients	CAS #	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Urea	57-13-6	Not available	Not available	Not available
Hydrochloric Acid	7647-01-0	0.492 mg/L/72 hours (Green algea)	Not available	None.

Persistence and degradability
: The methods for determining biodegradability are not applicable to inorganic substances.

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Bioaccumulation potential : No data is available on the product itself.

Components	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Hydrochloric Acid (CAS 7647-01-0)	Not applicable	Not applicable
Urea (CAS 57-13-6)		<10 dimensionless

Mobility in soil : No data is available on the product itself.

Other Adverse Environmental effects
: No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal : Handle waste according to recommendations in Section 7.

Methods of Disposal : Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261.
It is the responsibility of the waste generator to determine the proper waste identification and disposal method.
For disposal of unused or waste material, check with local, state and federal environmental agencies.

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SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	UN1760	Corrosive liquid, n.o.s. (Urea hydrochloride solution)	8	II	
49CFR/DOT Additional information	May be shipped as a limited quantity in receptacles not exceeding 1.0 Liters, according to 49 CFR 173.154.				
TDG	UN1760	CORROSIVE LIQUID, N.O.S. (Urea hydrochloride solution)	8	II	
TDG Additional information	May be shipped as LIMITED QUANTITY when transported in quantities no larger than 1 Litre, in packages not exceeding 30 kg gross mass.				
IMDG	UN1760	CORROSIVE LIQUID, N.O.S. (Urea Hydrochloride solution)	8	II	
IMDG Additional information	Consult the IMDG regulations for exceptions. EmS No. F-A, S-B				
ICAO/IATA	UN1760	Corrosive liquid, n.o.s. (Urea hydrochloride solution)	8	II	
ICAO/IATA Additional information	Refer to ICAO/IATA Packing Instruction				

Special precautions for user : Keep containers dry and tightly closed to avoid moisture absorption and contamination.

Environmental hazards : This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See ECOLOGICAL INFORMATION, Section 12. Avoid release to the environment.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

Ingredients	CAS #	TSCA Inventory	CERCLA Reportable Quantity(RQ) (40 CFR 117.302):	SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical	
					Toxic Chemical	de Minimis Concentration
Urea	57-13-6	Yes	Not applicable	Not applicable	No	N/Ap
Hydrochloric Acid	7647-01-0	Yes	5000 lb/ 2270 kg	500 lb TPQ (gas only)	Yes	1%

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes:Corrosive to metals;Acute toxicity;Skin corrosion; Eye Damage; Specific target organ toxicity, single exposure

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US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

Ingredients	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Urea	57-13-6	No	Not available	No	No	Yes	No	No	No
Hydrochloric Acid	7647-01-0	No	Not applicable	Yes	Yes	Yes	Yes	Yes	Yes

Canadian Information:

All ingredients are present on the DSL.

International Information:

Components listed below are present on the following International Inventory list:

Ingredients	CAS #	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Urea	57-13-6	200-315-5	Present	Present	(2)-1732	KE-35144	Present	HSR002808
Hydrochloric Acid	7647-01-0	231-595-7	Present	Present	(1)-215	KE-20189	Present	HSR004090

SECTION 16. OTHER INFORMATION

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
CSA: Canadian Standards Association
DOT: Department of Transportation
EPA: Environmental Protection Agency
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
IMDG: International Maritime Dangerous Goods
LC: Lethal Concentration
LD: Lethal Dose
N/Ap: Not Applicable
N/Av: Not Available
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average

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References : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices
2. ECHA - European Chemical Agency
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases
4. Safety Data Sheets from manufacturer.
5. US EPA Title III List of Lists
6. California Proposition 65 List
7. OECD - The Global Portal to Information on Chemical Substances - eChemPortal

Preparation Date (mm/dd/yyyy)
: 08/04/2026

Other special considerations for handling
: Provide adequate information, instruction and training for operators.

Prepared for: Catalynt Solutions,Inc. 240 Foster Ave. Bensenville, IL 60106 https://teamcatalynt.com (630) 521-1600	
Prepared by: ICC The Compliance Center Inc. Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada) http://www.thecompliancecenter.com	

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