SAFETY DATA SHEET

Issue Date 17-Apr-2015 **Revision Date** 17-Apr-2015 **Version** 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Name DISSOLVE DESCALER

Other means of identification
Product code: Part #106174
Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Descaler.
Uses advised against Consumer use

Details of the supplier of the safety data sheet
Supplier Address
Cleveland Range Company
1333 E. 179th Street
Cleveland, OH 44110
Phone: (216) 481-4900

Emergency telephone number
Emergency Telephone

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

Label elements

EMERGENCY OVERVIEW

Signal word
Danger

Hazard statements
Causes skin irritation
Causes serious eye damage
May be corrosive to metals

Appearance Aqueous solution **Physical state** Liquid **Odor** Pleasant

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep only in original container
Eyes 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
Skin IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation occurs: Get medical advice/attention
Wash contaminated clothing before reuse
Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
Ingestion IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
Absorb spillage to prevent material damage

Precautionary Statements - Storage
Store locked up
Store in corrosive resistant plastic, or steel container with a resistant inner liner
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Components	CAS-No	Weight %	Trade Secret
Hydrochloric acid	7647-01-0	8-10	*
Dipropylene glycol monomethyl ether	34590-94-8	1-6	*

4. FIRST AID MEASURES

First aid measures

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Skin contact: Wash off immediately with plenty of water. Consult a physician if necessary. Remove and wash contaminated clothing before re-use.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. If symptoms persist, call a physician.

Ingestion: Call a physician or Poison Control Centre immediately. Do not induce vomiting. Drink plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:
The product is not flammable.

Unsuitable extinguishing media None
Specific hazards arising from the chemical
Contact with metals may evolve flammable hydrogen gas. Water may be used to cool closed containers.

Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Special protective equipment for firefighters:
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment.

Environmental precautions

Environmental precautions: Should not be released into the environment.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Neutralise with Soda Ash or Lime. Dilute with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Use only in well-ventilated areas. Avoid contact with eyes and skin.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep in properly labelled containers. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using

Packaging materials Store in fiberglass, polyethylene, or polypropylene containers. Do not store in metal containers, especially aluminum.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Components	ACGIH TLV	OSHA (TWA mg/m^3):	IDLH:
Hydrochloric acid - 7647-01-0	2 ppm	5 ppm	50 ppm
Dipropylene glycol monomethyl ether - 34590-94-8	100 ppm	100 ppm	600 ppm

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Respiratory protection: Do not inhale aerosol. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hand protection: Nitrile rubber

Eye protection: Safety glasses with side-shields
Skin and body protection: Long sleeved clothing
General Hygiene Considerations Avoid contact with skin, eyes and clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance Aqueous solution **Odor** Pleasant **Color** Light yellow **Odor threshold** No information available

Property	Values	Remarks • Method	Property	Values
Melting point/freezing point	No information available		**pH**	< 1.0
			Boiling point / boiling range	101 °C / 214 °F
Flash point	No information available	Cleveland Open Cup	**Evaporation rate**	No information available
Flammability (solid, gas)	No information available		**Flammability Limit in Air**	
Upper flammability limit:	No information available		**Lower flammability limit:**	No information available
Vapor pressure	30 mmHg (est.)		**Vapor density**	No information available
Specific Gravity	> 1.0		**Water solubility**	Soluble in water
Solubility in other solvents	No information available		**Partition coefficient**	No information available
Autoignition temperature	No information available		**Decomposition temperature**	No information available
Kinematic viscosity	No information available		**Dynamic viscosity**	No information available

Explosive properties No information available
Oxidizing properties No information available

Other information

Softening point No information available
Molecular weight No information available
VOC Content (%) No information available
Density No information available
Bulk density No information available

10. STABILITY AND REACTIVITY

Reactivity
Not applicable

Chemical stability

Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Possibility of Hazardous Reactions Contact with metals may evolve flammable hydrogen gas.
Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Conditions to avoid Stable under recommended storage conditions.

Hazardous Decomposition Products

Hazardous Decomposition Products Chlorine and hydrogen gas may be released at high temperatures.

Incompatible materials

Incompatible materials Strong bases. Strong oxidising agents

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known or supplied information

Eye contact Avoid contact with eyes.

Skin contact Irritating to skin.

Inhalation Avoid breathing vapors or mists. Vapors may be irritating to eyes, nose, throat, and lungs.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Components	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid - 7647-01-0	= 700 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 3124 ppm (Rat) 1 h
Dipropylene glycol monomethyl ether - 34590-94-8	= 5230 mg/kg (Rat)	= 9500 mg/kg (Rabbit)	-

Information on toxicological effects

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

Sensitization No sensitization responses were observed.
Mutagenic effects: Did not show mutagenic or teratogenic effects in animal experiments.
Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive toxicity This product does not contain any known or suspected reproductive hazards.
STOT - Single Exposure None under normal use conditions.
STOT - Repeated Exposure None under normal use conditions.
Aspiration hazard Not applicable.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 6813 mg/kg
ATEmix (dermal) 41651 mg/kg
ATEmix (inhalation-dust/mist) 5.2 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

No known hazards to the aquatic environment.

9.9% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Dipropylene glycol monomethyl ether - 34590-94-8	
Algae/aquatic plants	-
Fish	10000: 96 h Pimephales promelas mg/L LC50 static
Crustacea	1919: 48 h Daphnia magna mg/L LC50

Persistence and degradability
Readily biodegradable, according to appropriate OECD test. (based on components).

Bioaccumulation
No information available.

Mobility
Soluble in water.

Components	Partition coefficient
Dipropylene glycol monomethyl ether - 34590-94-8	-0.064

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

Note: This material is corrosive to Aluminum only. Non-Corrosive to Skin & Mild Steel

DOT Not Regulated by ground transportation only per exception in 49 CFR §173.154(d)(1).

TDG

UN-No: UN3264
Proper shipping name: Corrosive Liquid, Acidic, Inorganic, n.o.s. (Contains Hydrochloric Acid)
Hazard Class: 8
Packing group: PGIII

IATA-DGR

UN-No: UN3264
Proper shipping name: Corrosive Liquid, Acidic, Inorganic, n.o.s. (Contains Hydrochloric Acid)
Hazard Class: 8
Packing group: PGIII

IMO / IMDG

UN/ID No. UN3264
Proper shipping name Corrosive Liquid, Acidic, Inorganic, n.o.s. (Contains Hydrochloric Acid)
Hazard Class 8
Packing group PGIII

15. REGULATORY INFORMATION

International Inventories

TSCA: Listed in TSCA
DSL: Not listed in DSL. Contains a chemical on the NDSL list.
EINECS/ELINCS This product does not comply with EINECS/ELINCS
CHINA: This product does not comply with China IECSC.
KECL: This product does not comply with Korea KECL.
PICCS: This product does not comply with Philippines PICCS.
AICS: This product does not comply with Australia AICS

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Components	SARA 313 Threshold:
Hydrochloric acid	Hydrochloric acid aerosol/mist only (1%).

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

State Regulations (RTK)

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Components	NJRTK:	MARTK:	PARTK:
Hydrochloric acid - 7647-01-0	Substance no. 1012 Listed.	Listed.	Listed.
Dipropylene glycol monomethyl ether - 34590-94-8	Substance no. 0804 Listed.	Listed.	Listed.

U.S. EPA Label Information
EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

Nfpa:
Health: 2
Flammability: 0
Instability 0
NFPA/HMIS * for Carc, Muta, Tera, Specific Organ *
HMIS health rating:
Health: 2
Flammability: 0
Physical hazards 0
Personal protection B

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Revision Note
Not applicable
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