Safety Data Sheet



Revision Number: 003.0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:TITRAProduct type:AuxiliaRestriction of Use:NoneCompany address:Henkel CorporationOne Henkel WayRocky Hill, Connecticut 06067

TITRATING SOLUTION 60 (4 L) Auxiliary product None identified

 IDH number:
 592440

 Item number:
 592440

 Region:
 United States

 Contact information:
 Enderstand

 Telephone:
 (860) 571-510

 MEDICAL EMERGENCY
 Phone:
 Poison Control Center

 1-877-671-4608 (toll free) or 1-303-592-1711
 TRANSPORT EMERGENCY
 Phone:
 CHEMTREC

 1-800-424-9300 (toll free) or 1-703-527-3887
 Internet:
 www.henkelna.com
 Enderstand

2. HAZARDS IDENTIFICATION

DANGER:

EMERGENCY OVERVIEW CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

SKIN CORROSION 1C SERIOUS EYE DAMAGE 1	HAZARD CLASS	HAZARD CATEGORY
	SKIN CORROSION	1C
PICTOGRAM(S)	SERIOUS EYE DAMAGE	1
	PICTOGR AM(S)	

Precautionary Statements

Prevention:	Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Wear protective gloves, eve protection, and face protection.
Response:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. 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 remove. Continue rinsing. Immediately call a poison control center or physician. Wash contaminated clothing before reuse.
Storage:	Store locked up.
Disposal:	Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS lazardous Component(s) CAS Number Percentage*

Hazardous Component(s)	CAS Number	Percentage*
Hydrochloric acid	7647-01-0	1 - 5

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4	I. FIRST AID MEASURES
Inhalation:	If mist or vapor of this product is inhaled, remove person immediately to fres air. Seek medical attention if symptoms develop or persist.
Skin contact:	Remove contaminated clothing and footwear. For skin contact, flush with lar amounts of water. Seek immediate medical attention. Launder contaminate clothing before reuse.
Eye contact:	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
Ingestion:	Get immediate medical attention. Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Symptoms:	See Section 11.
5.	FIRE FIGHTING MEASURES
Extinguishing media:	Use media appropriate for surrounding material.
Special firefighting procedures:	Wear full protective clothing. Wear self-contained breathing apparatus.
Unusual fire or explosion hazards:	This product is an aqueous mixture which will not burn. May react with meta to form flammable hydrogen gas.
Hazardous combustion products:	Upon combustion, oxides of chlorine may be released.
6. ACC	IDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up.		
Clean-up methods:	Absorb spill with inert material. Shovel material into appropriate container for disposal.	
7. HANDLING AND STORAGE		

Handling:	Avoid contact with eyes, skin and clothing. Do not inhale vapors and fumes. Wash thoroughly after handling. Use only with adequate ventilation. Do not take internally. For industrial use only.
Storage:	For safe storage, store at or above 4.4 °C (39.9 °F) Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Thaw and mix thoroughly if frozen.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Hydrochloric acid	2 ppm Ceiling 5 ppm (7 mg/m3) Ceiling None None			
Engineering controls:		e local and general exhau t buildup of any vapors o t.		
Respiratory protection:	If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.			
Eye/face protection:	Wear chemical goggles; face shield (if splashing is possible).			
Skin protection:	Chemical resistant, impermeable gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Colorless
Odor:	Pungent
Odor threshold:	Not available.
pH:	< 1
Vapor pressure:	Not determined
Boiling point/range:	98.9 °C (210°F)
Melting point/ range:	Not determined
Specific gravity:	1.01 - 1.03
Vapor density:	Not determined
Flash point:	Not applicable
Flashback:	Not applicable
Flame projection:	Not applicable
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not determined
Evaporation rate:	Not available.
Solubility in water:	Complete
Partition coefficient (n-octanol/water):	Not determined
VOC content:	Not applicable
Viscosity:	Not available.
Decomposition temperature:	Not available.
10.	STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Thermal decomposition may yield hydrogen chloride.
Incompatible materials:	Do not mix with chlorates. Explosive HYDROGEN GAS may be released if aqueous solutions of this material come into contact with reactive metals (IRON, ZINC, ALUMINUM).
Reactivity:	This product may react with strong alkalies.
Conditions to avoid:	Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation:	Mists, vapors or liquid may cause severe irritation or burns. Inhalation of mists or vapors may produce upper airway edema, wheezing, pulmonary edema, pneumonitis and respiratory failure.
Skin contact:	This product is severely irritating to the skin and may cause burns.
Eye contact:	This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.
Ingestion:	This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Hydrochloric acid	Oral LD50 (RABBIT) = 900 mg/kg Inhalation LC50 (RAT, 1 h) = 3124 ppm	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Hydrochloric acid	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information:

Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:	Follow all local, state, federal and provincial regulations for disposal.
Hazardous waste number:	This product, if discarded directly, would be a characteristic RCRA corrosive waste (D002).

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation	Ground (49 CFR)
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0.0. Department of Transportation Ground (-	
Proper shipping name:	Hydrochloric acid
Hazard class or division:	8
Identification number:	UN 1789
Packing group:	III
International Air Transportation (ICAO/IATA)	
Proper shipping name:	Hydrochloric acid
Hazard class or division:	8
Identification number:	UN 1789
Packing group:	III
Water Transportation (IMO/IMDG)	
Proper shipping name:	HYDROCHLORIC ACID
Hazard class or division:	8
Identification number:	UN 1789
Packing group:	111

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed or are exempt from listing on the Toxic Substances Control Act	
TSCA 12 (b) Export Notification:	Inventory. None above reporting de minimis	
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313:	Hydrochloric acid (CAS# 7647-01-0). Immediate Health None above reporting de minimis	
California Proposition 65:	No California Proposition 65 listed chemicals are known to be present.	
Canada Regulatory Information		
CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.	
16. OTHER INFORMATION		

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Jennifer Mckay, Regulatory Affairs Specialist

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