

		Oreq Test Solution #3 Acid Demand & Total Alkalinity			
Revision date	•	5-21-15			
Section 1	Identification				
Product ID:	Product ID: Test Solution #3 Acid Demand & Total Alkalinity				
Chemical Name:Acid Demand & Total AlkalinitySynonyms:NoneChemical Formula:Not AvailableCAS Number:Not AvailableProduct Use:For Acid Demand and Total Alkalinity Testing in Swimming Pools/Spas			n Swimming Pools/Spas		
Supplier:	Supplier: Oreq Corporation 42306 Remington Avenue Temecula, CA 92590 951-296-5076				
Emergency Pho	Emergency Phone# Chemtrec: 1-800-424-9300				
Section 2	Hazards identifi	cation			
Appearance – C	lear, colorless	Physical State – Liquid O	dor - Pungent		
GHS Classificat Skin Cor	ion rosion/irritation: (Cate	gory 1) Serious eye damage/eye irritation (Catego	ry 1)		
Hazard Stateme H314: Ca	nt(s) auses severe skin bur	ns and eye damage.			
Precautionary Statement(s)					
Prevention P260: Do not breathe dust/fume/gas/mist/vapors/spray. P264: Wash skin thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P280: Wear protective gloves/protective clothing/eye protection/face protection. Response P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340: IFINHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing					



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Section 2 Hazards identification (Continued)

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P309+P311: IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician. P363: Wash contaminated clothing before re-use.

Potential Health Effects

Primary routes of entry are by way of eye, skin and inhalation.

Potential Health Effects: Eyes

Severe irritation of the eyes and eyelids. If the acid is not quickly removed by thorough irrigation with water, there may be prolonged or permanent visual impairment or total loss of sight. Hydrogen chloride gas escaping from the aqueous solution is immediately irritating to the eyes.

Potential Health Effects: Skin

Irritating and corrosive to skin and can cause severe burns if not properly washed off. Repeated contact of the skin may lead to the development of dermatitis. The chronic local effect may consist of multiple areas of superficial destruction of the skin or of primary irritant dermatitis.

Potential Health Effects: Ingestion

This product causes severe burns of mucus membranes of the mouth, esophagus, and stomach if swallowed.

Potential Health Effects: Inhalation

Inhalation of gas, mist, fog, or spray will cause severe irritation of the upper respiratory tract, resulting in coughing, burning of the throat, and a choking sensation. Excessive or long-term exposure may result in varying degrees of irritation or damage to the respiratory tract tissues and increased susceptibility to respiratory illness, including pulmonary edema. Prolonged or repeated exposure to concentration in excess of the TLV may cause discoloration and/or erosion of the teeth.

HMIS Ratings:	Health: 3	Fire: 0	Physical Hazard: 0
NFPA Ratings:	Health: 3	Fire: 0	Reactivity: 0

Section 3 Composition / Information on ingredients

COMPONENT	CAS#	PERCENT
Hydrochloric Acid	7647-01-0	Less than 1%
Water	7232-18-5	Up to 100%

Ingredients listed in this section have been determined to be hazardous as defined in 29CFR 1910.1200. Materials determined to be health hazards are listed if they comprise 1% or more of the composition.

If the classifier has reason to suspect that an ingredient present at a concentration <1% will affect classification of the mixture for skin or eye corrosion/irritation, that ingredient shall also be considered relevant as defined in 29CFR 1910.1200 Appendix A.



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Section 4	First - aid measures
General advice	Do not get in eyes, on skin, or on clothing.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Consult a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Call a physician immediately.
Ingestion	Clean mouth with water. Do NOT induce vomiting. Call a physician immediately. Drink plenty of water. Never give anything by mouth to an unconscious person.
Section 5	Fire - fighting measures

Extinguishing Media

Suitable Extinguishing Media:

Carbon dioxide, dry chemical and foam may all be used in areas where hydrogen chloride is stored.

Unsuitable Extinguishing Media: Do not use water.

Fire Fighting Equipment/Instructions:

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Section 6 Accidental release measures

Personal precautions	Ensure adequate ventilation. Use personal protective equipment. Refer to Section 8. Do not touch damaged packages or spilled material. Avoid contact with skin, eyes, and inhalation of vapors.
Environmental precautions	Section 311 of the Clean Water Act lists Hydrochloric Acid as a hazardous substance which, if discharged into or upon water, may require immediate response to mitigate danger to public health.Spills or releases should be reported, if required, to the appropriate local, state and federal agencies. See Section 12 for additional Ecological Information.
Methods for cleaning up	Neutralize spill with alkaline material (sodium bicarbonate), being careful to prevent splattering, then containerize slurry and hold for later disposal. If local regulations permit, dilute slurry with water and rinse to drain with excess water. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.



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SAFETY DATA SHEET

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Section 7 Handling and storage

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not ingest. Do not eat, drink, or smoke when using this product.

Storage Keep containers tightly closed in a dry, cool, and well-ventilated place. To maintain product quality, do not store in heat or direct sunlight. Do not store in metal containers. Keep out of the reach of children.

Incompatible Products Strong bases. Metals. Reducing agents. Oxidizing agents.

Section 8 Exposure controls / personal protection

Control parameters				
Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	
Hydrochloric Acid	Ceiling: 2 ppm	Ceiling 5 ppm (7mg/m ³)	IDLH: 50 ppm	
7647-01-0	0 11		Ceiling: 5 ppm	
			Ceiling: 7 mg/m3	
Water 7732-18-5	-	-	None Established	
Appropriate engineering control	<u>ols</u>			
Engineering Measures	Showers			
	Eyewash stations			
	Ventilation systems.			
Individual protection measures	, such as personal protec	tive equipment		
Eye/face Protection	Safety glasses with side-shields.			
Skin and body protection	Wear protective gloves/clothing.			
Expiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.			posure limit they	

Section 9 Physical and chemical properties

Appearance: Physical State: solution	Water white to slightly yellow Liquid	Odor: pH:	P ungent Approximately 2.0 in 0.2%
Vapor Pressure:	NA	Vapor Density:	1.3 @ 20° C
Boiling Point:	NA	Melting Point:	NA
Solubility (H2O):	Infinite	Solubility :	NA
Specific Gravity:	NA	Freezing Point:	NA
Particle Size:	NA	Softening Point:	NA
Evaporation Rate:	NA	Viscosity:	NA
Bulk Density:	NA	Percent Volatile:	NA
Molecular Weight:	NA	VOC:	NA
Octanol/H2O Coeff.:	NA	Heat Value:	NA

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Section 9 Physical and chem	ical properties (Continued)
Sat. Vapor Conc.: NA Lower Flammability Limit (LFL):NA Flash Point: NA Flammability Class: NA Decomposition Temperature: NA	Upper Flammability Limit (UFL): NA Flash Point Method: NA Auto Ignition: NA Burning Rate: NA
Section 10 Stability and reacting	vity
Stability	Stable under normal conditions of use and storage.
Hazardous Reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Excessive heat. Incompatible products. Direct sunlight.
Incompatible materials	Strong bases. Metals. Reducing agents. Oxidizing agents.
Hazardous decomposition products	Chlorine gas. Hydrogen chloride. Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

Section 11 Toxicological information

Information on likely routes of exposure

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Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrochloric Acid 7647-01-0	238 - 277 mg/kg(Rat)	> 5010 mg/kg(Rabbit)	= 1.68 mg/L(Rat)1 h
Water 7732-18-5	> 90 mL/kg (Rat)	None Established	None Established

Information on toxicological effects

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrochloric Acid 7647-01-0	-	Group 3	None Established	-
Water 7732-18-5	_	None Established	None Established	-

Potential Health Effects: Skin Corrosion/Irritation

No additional information available.



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Section 11	Toxicological infor	mation	(Continued)
	Effects: Eye Damage/Irr		
	onal information available	•	
	Effects: Ingestion		
	Effects: Inhalation	•	
	nal information available		
	sitization/Skin Sensitiza	-	
• •	onal information available		
Germ Cell Mutag		•	
-	onal information available		
Carcinogenicity			
A: General Produ	uct Information		
No additio	onal information available		
B: Component C			
Hydrogen chlorie	· /		
	4 - Not Classifiable as a		•
	Ionograph 54 [1992] (Gro	oup 3 (not	classifiable))
Reproductive To			
	onal information available		_
	Organ General Toxicity onal information available		Exposure
Specified Target	Organ General Toxicity	: Repeate	ed Exposure
No additio	onal information available).	-

Section 12 Ecological information

Ecotoxicity

Unknown Aquatic Toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Hydrochloric Acid 7647-01-0	None Established	282: 96 h Gambusia affinis mg/L LC50 static	None Established
Water 7732-18-5	None Established	None Established	None Established

Persistence and degradability
Bioaccumulation/Accumulation
Mobility in Soil

No information available. No information available. No information available.

Environmental Fate

When released into the soil, Hydrochloric Acid is not expected to biodegrade and may leach into groundwater.



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Section 13 Disposal considerations

Waste Disposal Instructions

The materials resulting from clean-up operations may be hazardous wastes and, therefore, subject to specific regulations. Package, store, transport and dispose off all clean-up materials and any contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations.

Shipments of waste materials may be subject to manifesting requirements.

Appropriate disposal will depend on the nature of each waste material and should be performed by competent and properly permitted contractors.

Ensure that all federal, state and local agencies receive proper notification of spill and disposal methods. See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Section 14 Transport information

DOT

UN-No	1789
Proper shipping name	HYDROCHLORIC ACID
Hazard Class	8
Packing group	III
Reportable Quantity (RQ)	5000
Labels Required	Corrosive
-	



<u>IATA</u>

UN-No	1789
Proper shipping name	HYDROCHLORIC ACID
Hazard Class	8
Packing group	III

IMDG/IMO

UN-No	1789
Proper shipping name	HYDROCHLORIC ACID
Hazard Class	8
Packing group	III

Section 15 Regulatory information

International	Inventories
TOOL	0

TSCA	Complies	IECSC	Complies
DSL/NDSL	Complies	KECL	Complies
EINECS/ELINCS	Complies	PICCS	Complies
ENCS	Complies	AICS	Complies
	•		



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Section 15 Regulatory information (Continued)

US Federal Regulations

A: General Product Information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the Controlled Products Regulations. This product has been classified hazardous under OSHA regulations (29 CFR 1910.1200).

B: Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

Component Analysis - State

None of this product's components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

WHMIS Classification: D2B, B3

Additional Regulatory Information

None

Section 16 Other information

<u>NFPA</u>	Health hazard 3	Flammability 0	Instability 0	Physical and Chemical Hazards N/A
<u>HMIS</u>	Health hazard 3	Flammability 0	Physical hazards 0	Personal precautions B
		DATE OF PREPARATION		

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