



SAFETY DATA SHEET

Product name **Oreq Test Solution #3
Acid Demand & Total Alkalinity**

Revision date **5-21-15**

Section 1 Identification

Product ID: **Test Solution #3 Acid Demand & Total Alkalinity**
Chemical Name: Acid Demand & Total Alkalinity
Synonyms: None
Chemical Formula: Not Available
CAS Number: Not Available
Product Use: **For Acid Demand and Total Alkalinity Testing in Swimming Pools/Spas**

Supplier: **Oreq Corporation
42306 Remington Avenue
Temecula, CA 92590
951-296-5076**

Emergency Phone# **Chemtrec: 1-800-424-9300**

Section 2 Hazards identification

EMERGENCY OVERVIEW DANGER



Appearance – Clear, colorless

Physical State – Liquid

Odor - Pungent

GHS Classification

Skin Corrosion/irritation: (Category 1) Serious eye damage/eye irritation (Category 1)

Hazard Statement(s)

H314: Causes severe skin burns 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: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing



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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 7647-01-0 | Ceiling: 2 ppm | Ceiling 5 ppm (7mg/m ³) | IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m ³ |
| Water 7732-18-5 | - | - | None Established |

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face Protection Safety glasses with side-shields.
Skin and body protection Wear protective gloves/clothing.
Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Section 9 Physical and chemical properties

| | | | |
|----------------------------|--------------------------------|--------------------------|---------------------------|
| Appearance: | Water white to slightly yellow | Odor: | Pungent |
| Physical State: | Liquid solution | pH: | 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 chemical properties (Continued)

Sat. Vapor Conc.: NA Upper Flammability Limit (UFL): NA
Lower Flammability Limit (LFL): NA Flash Point Method: NA
Flash Point: NA Auto Ignition: NA
Flammability Class: NA Burning Rate: NA
Decomposition Temperature: NA

Section 10 Stability and reactivity

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

Component Information

| 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 information (Continued)

Potential Health Effects: Eye Damage/Irritation

No additional information available.

Potential Health Effects: Ingestion

No additional information available.

Potential Health Effects: Inhalation

No additional information available.

Respiratory Sensitization/Skin Sensitization

No additional information available.

Germ Cell Mutagenicity

No additional information available.

Carcinogenicity

A: General Product Information

No additional information available.

B: Component Carcinogenicity

Hydrogen chloride (7647-01-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 54 [1992] (Group 3 (not classifiable))

Reproductive Toxicity

No additional information available.

Specified Target Organ General Toxicity: Single Exposure

No additional information available.

Specified Target Organ General Toxicity: Repeated Exposure

No additional 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

No information available.

Bioaccumulation/Accumulation

No information available.

Mobility in Soil

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 |



IATA

| | |
|-----------------------------|-------------------|
| 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

| | | | |
|----------------------|----------|--------------|----------|
| 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 product's 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

NFPA Health hazard 3 Flammability 0 Instability 0 Physical and Chemical Hazards N/A

HMIS Health hazard 3 Flammability 0 Physical hazards 0 Personal precautions B

DATE OF PREPARATION

5-21-15

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