

MATERIAL SAFETY DATA SHEET

Date issued : 19/06/2025

Revision : 01

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : **ISOQUEST NO. 2**

CHEMICAL DESCRIPTION : **AQUEOUS HYDROCHLORIC ACID REAGENT**

COMPANY : **ImproChem (Pty) Ltd. T/A AECI Water**
1 Wharhirst Road.
Umbogintwini.
Durban , 4126.

EMERGENCY TELEPHONE NUMBER **0800 SPILLS OR 0800 774557**

TELEPHONE NUMBERS **+27 11 971 0400**

FAX NUMBERS **+27 11 394 3436**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical substance(s) as hazardous

Hazardous Substance(s)	CAS NO	% (w/w)
Hydrochloric Acid	7647-01-0	10.0 - 30.0

3. HAZARDS IDENTIFICATION

****EMERGENCY OVERVIEW****

WARNING

Irritating to eyes and skin.

Do not get in eyes, on skin, on clothing. Do not take internally. Keep container tightly closed. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water.

Wear suitable protective clothing, gloves and eye/face protection.

Not flammable or combustible. May evolve HCl under fire conditions. Contact with reactive metals (e.g. aluminum) may result in the generation of flammable hydrogen gas.

PRIMARY ROUTES OF EXPOSURE :

Eye, Skin, Inhalation

HUMAN HEALTH HAZARDS - ACUTE :

EYE CONTACT :

Can cause moderate to severe irritation.

SKIN CONTACT :

Can cause moderate irritation.

INGESTION :

Not a likely route of exposure. No adverse effects expected.

INHALATION :

Not a likely route of exposure. Aerosols or product mist may irritate the upper respiratory tract.

SYMPTOMS OF EXPOSURE :

Acute :

A review of available data does not identify any symptoms from exposure not previously mentioned.

Chronic :

A review of available data does not identify any symptoms from exposure not previously mentioned.

AGGRAVATION OF EXISTING CONDITIONS :

A review of available data does not identify any worsening of existing conditions.

4.	FIRST AID MEASURES
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EYE CONTACT :

Immediately flush eye with water for at least 15 minutes while holding eyelids open. If irritation persists, repeat flushing. Get immediate medical attention.

SKIN CONTACT :

Immediately flush with plenty of water for at least 15 minutes. If symptoms persist, call a physician.

INGESTION :

Do not induce vomiting without medical advice. If conscious, washout mouth and give water to drink. Get medical attention.

INHALATION :

Remove to fresh air, treat symptomatically. Get medical attention.

NOTE TO PHYSICIAN :

Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.

5.	FIRE FIGHTING MEASURES
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FLASH POINT : None

LOWER EXPLOSION LIMIT : Not flammable

UPPER EXPLOSION LIMIT : Not flammable

EXTINGUISHING MEDIA :

Use extinguishing media appropriate for surrounding fire. Not expected to burn.

FIRE AND EXPLOSION HAZARD :

Not flammable or combustible. May evolve HCl under fire conditions. Contact with reactive metals (e.g. aluminum) may result in the generation of flammable hydrogen gas.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING :

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6.	ACCIDENTAL RELEASE MEASURES
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PERSONAL PRECAUTIONS :

Restrict access to area as appropriate until clean-up operations are complete. Ensure clean-up is conducted by trained personnel only. Ventilate spill area if possible. Do not touch spilled material. Stop or reduce any leaks if it is safe to do so. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Notify appropriate government, occupational health and safety and environmental authorities.

METHODS FOR CLEANING UP :

SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area.

ENVIRONMENTAL PRECAUTIONS :

Do not contaminate surface water.

7.	HANDLING AND STORAGE
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HANDLING :

Avoid eye and skin contact. Do not take internally. Do not get in eyes, on skin, on clothing. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labelled. Keep the containers closed when not in use. Use with adequate ventilation.

STORAGE CONDITIONS :

Store the containers tightly closed. Store in suitable labelled containers. Store separately from bases.

UNSUITABLE CONSTRUCTION MATERIAL :

Do not use aluminum or mild steel.

8.	EXPOSURE CONTROLS/PERSONAL PROTECTION
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OCCUPATIONAL EXPOSURE LIMITS :

Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below.

ACGIH/TLV :

Substance(s)

Hydrochloric Acid CEILING: 5 ppm , 7.5 mg/m³

OSHA/PEL :

Substance(s)

Hydrochloric Acid CEILING: 5 ppm , 7 mg/m³

ENGINEERING MEASURES :

General ventilation is recommended.

RESPIRATORY PROTECTION :

Respiratory protection is not normally needed.

HAND PROTECTION :

PVC gloves, Neoprene gloves, Nitrile gloves, Butyl gloves

SKIN PROTECTION :

Wear standard protective clothing.

EYE PROTECTION :

Wear chemical splash goggles.

HYGIENE RECOMMENDATIONS :

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. Keep an eye wash fountain available. Keep a safety shower available.

HUMAN EXPOSURE CHARACTERIZATION :

Based on our recommended product application and personal protective equipment, the potential human exposure is: Low

9.	PHYSICAL AND CHEMICAL PROPERTIES
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PHYSICAL STATE	Liquid
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APPEARANCE	Colourless
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ODOR	Pungent
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SPECIFIC GRAVITY	1.093 @ 60 °F / 15.6 °C
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SOLUBILITY IN WATER	Complete
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pH (100 %)	< 0.5
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BOILING POINT	228 °F / 109 °C
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10.	STABILITY AND REACTIVITY
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STABILITY :

Stable under normal conditions.

HAZARDOUS POLYMERIZATION :

Hazardous polymerization will not occur.

CONDITIONS TO AVOID :

Freezing temperatures.

MATERIALS TO AVOID :

Contact with strong alkalies (e.g. ammonia and its solutions, carbonates, sodium hydroxide (caustic), potassium hydroxide, calcium hydroxide (lime), cyanide, sulfide, hypochlorites, chlorites) may generate heat, splattering or boiling and toxic vapors. Contact with reactive metals (e.g. aluminum) may result in the generation of flammable hydrogen gas.

HAZARDOUS DECOMPOSITION PRODUCTS :

Under fire conditions: May evolve toxic fumes.

11.	TOXICOLOGICAL INFORMATION
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The following results are for the hazardous components.

ACUTE ORAL TOXICITY :

Species	LD50	Tested Substance
Rat	900 mg/kg	Hydrochloric Acid
Rating : Non-Hazardous		

ACUTE INHALATION TOXICITY :

Species	LC50	Tested Substance
Rat	3,124 mg/l (1.00 hrs)	Hydrochloric Acid

PRIMARY SKIN IRRITATION :

Draize Score	Tested Substance
8.0 / 8.0	(Hydrochloric Acid)
Rating : Extremely irritating (Corrosive)	

PRIMARY EYE IRRITATION :

Draize Score	Tested Substance
110.0 / 110.0	(Hydrochloric Acid)
Rating : Extremely irritating (Corrosive)	

SENSITIZATION :

This product is not expected to be a sensitizer.

CARCINOGENICITY :

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), or the American Conference of Governmental Industrial Hygienists (ACGIH).

Based on our hazard characterization, the potential human hazard is: High

12.	ECOLOGICAL INFORMATION
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ECOTOXICOLOGICAL EFFECTS :

No toxicity studies have been conducted on this product.

Based on our hazard characterization, the potential environmental hazard is: Moderate

13.	DISPOSAL CONSIDERATIONS
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If this product becomes a waste, it meets the criteria of a hazardous waste. Consult state or local regulation for any additional handling, treatment or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal or recycling facility.

14.	TRANSPORT INFORMATION
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LAND TRANSPORT :

Proper Shipping Name :	HYDROCHLORIC ACID SOLUTION
Technical Name(s) :	
UN/ID No :	UN 1789
Hazard Class - Primary :	8
Packing Group :	III
Flash Point :	None

AIR TRANSPORT (ICAO/IATA) :

Proper Shipping Name :	HYDROCHLORIC ACID SOLUTION
Technical Name(s) :	
UN/ID No :	UN 1789
Hazard Class - Primary :	8
Packing Group :	III
IATA Cargo Packing Instructions :	821
IATA Cargo Aircraft Limit :	60 L (Max net quantity per package)

MARINE TRANSPORT (IMDG/IMO) :

Proper Shipping Name :	HYDROCHLORIC ACID SOLUTION
Technical Name(s) :	
UN/ID No :	UN 1789
Hazard Class - Primary :	8
Packing Group :	III

15.	REGULATORY INFORMATION
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NATIONAL REGULATIONS, USA :

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200 :

Based on our hazard evaluation, the following substance(s) in this product is/are hazardous and the reason(s) is/are shown below.

Hydrochloric Acid : Irritant

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313 :

SECTIONS 311 AND 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370) :

Our hazard evaluation has found this product to be hazardous.

X	Immediate (Acute) Health Hazard
-	Delayed (Chronic) Health Hazard
-	Fire Hazard
-	Sudden Release of Pressure Hazard
-	Reactive Hazard

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40 CFR / formerly Sec. 311 :

This product contains the following substances listed in the regulation:

<u>Substance(s)</u>	<u>Citations</u>
Hydrochloric Acid :	Sec. 311

CLEAN AIR ACT, Sec. 111 (40 CFR 60, Volatile Organic Compounds), Sec. 112 (40 CFR 61, Hazardous Air Pollutants), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances) :

This product contains the following substances listed in the regulation:

<u>Substance(s)</u>	<u>Citations</u>
Hydrochloric Acid :	Sec. 112

CALIFORNIA PROPOSITION 65 :

This product does not contain substances which require warning under California Proposition 65.

16.	OTHER INFORMATION
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