

MATERIAL SAFETY DATA SHEET

Date issued : 19/06/2025

Revision : 01

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : **ISOQUEST NO. 3**

CHEMICAL DESCRIPTION : **AQUEOUS 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)
Nitric Acid	7697-37-2	1 - 6
Bismuth Nitrate	10035-06-0	0.01 – 0.05

3. HAZARDS IDENTIFICATION

****EMERGENCY OVERVIEW****

WARNING

Irritating to eyes and skin. Causes severe skin and eye burns and damage
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 NOx 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 :

Causes severe eye burns and eye damage.

SKIN CONTACT :

Causes severe skin burns and skin damage.

INGESTION :

Risk of gastric perforation..

INHALATION :

Aerosols or product mist may irritate and burn 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 NO_x 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 such as sand. 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 alkalis

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.

None established

ENGINEERING MEASURES :

General ventilation is recommended.

RESPIRATORY PROTECTION :

Respiratory protection is not normally needed.

HAND PROTECTION :

Viton gloves, Nitrile rubber gloves.

PVA gloves are NOT suitable

SKIN PROTECTION :

Wear standard acid resistant 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.

9.	PHYSICAL AND CHEMICAL PROPERTIES
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PHYSICAL STATE	Liquid
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APPEARANCE	Colourless
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SPECIFIC GRAVITY	Not determined
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SOLUBILITY IN WATER	Complete
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pH (100 %)	< 1
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BOILING POINT	> 100 °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 :

Excessive heat.

MATERIALS TO AVOID :

Mixtures with alkalis, aluminium ,steel

HAZARDOUS DECOMPOSITION PRODUCTS :

Under fire conditions: May evolve toxic metal oxide smoke
 Nitrogen Oxides (NOx)

11.	TOXICOLOGICAL INFORMATION
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Toxicity studies have not been conducted on this product

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).

12.	ECOLOGICAL INFORMATION
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ECOTOXICOLOGICAL EFFECTS :

No toxicity studies have been conducted on this product.

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 :	Nitric Acid , Bismuth Pentahydrate mixture
Technical Name(s) :	
UN/ID No :	UN 3264
Hazard Class - Primary :	8
Packing Group :	II
Flash Point :	None

AIR TRANSPORT (ICAO/IATA) :

Proper Shipping Name :	Nitric Acid , Bismuth Pentahydrate mixture
Technical Name(s) :	
UN/ID No :	UN 3264
Hazard Class - Primary :	8
Packing Group :	II

MARINE TRANSPORT (IMDG/IMO) :

Proper Shipping Name :	Nitric Acid , Bismuth Pentahydrate mixture
Technical Name(s) :	
UN/ID No :	UN 3264
Hazard Class - Primary :	8
Packing Group :	II
EMS No. :	F-A, S-B

15.	REGULATORY INFORMATION
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CALIFORNIA PROPOSITION 65 :

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

16.	OTHER INFORMATION
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