
SAFETY DATA SHEET

1 Identification of the substance or preparation and the supplier

Product Name: **OXYGEN CONTROL**
Datasheet Number: 571315 3.0.0
Use of the substance/preparation: Boiler water treatment
Product Part Number: 571315 (25 liter)

Name of Supplier: Unitor ASA
Address of Supplier: Willem Barentszstraat 50
3165 AB Rotterdam-Albrandswaard
The Netherlands

Telephone: +31 10 4877 777
Fax: +31 10 4877 888
Responsible Person: Leen de Visser, Corporate Product Safety Manager, Tel.: +31 6 538 63736

Name of Manufacturer: UNITOR CHEMICALS AS
Address of Manufacturer: P.O.Box 15
3141 Kjøpmannskjær
Norway.
Telephone: +47 333 515 00

Emergency Telephone: NCEC: +44 1865 407333
CHEMTREC (800) 424 9300
CMA +1 703 527 3887
Greece +30 1 7793777

2 Composition/information on ingredients

Chemical Name	Concentration	CAS Number	EC Number	R Phrases	Symbols
Hydrazine hydrate	10-30	10217-52-4	206-114-9	45, 23/24/25, 34, 50/53	T
Non classified ingredients	60-90				

3 Hazards identification

- Odour: Smells of ammonia
- Appearance: Liquid, colourless, soluble in water
- Contact with eyes: Prolonged skin or eye contact may cause chemical burns
- Contact with skin: May cause sensitisation by skin contact (R43), Prolonged skin or eye contact may cause chemical burns
- Inhalation: Severe irritant to respiratory system, skin and eyes
- Ingestion: The ingestion of significant quantities may cause damage to mucous membranes
- May cause cancer (R45)
- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R51/53)

3 Hazards identification (....)



Toxic



Dangerous for the Environment

4 First aid measures

Contact with skin

- Remove contaminated clothing immediately and drench affected skin with plenty of water. Then wash with soap and water
- Seek medical attention if irritation persists
- Contaminated clothing should be laundered before reuse

Contact with eyes

- If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
- Obtain immediate medical attention

Ingestion

- Never make an unconscious person vomit or drink fluids
- Give plenty of water to drink
- Obtain immediate medical attention

Inhalation

- Remove patient to fresh air
- Keep warm and at rest, in a half upright position. Loosen clothing
- Seek medical attention if ill effects occur

General

- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) (S45)

5 Fire-fighting measures

- Non combustible
- Decomposition products may include nitrogen oxides
- Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions

6 Accidental release measures

Personal Precautions

- Wear protective clothing as per section 8

Environmental Precautions

- Do not allow to enter public sewers and watercourses

Clean Up Actions

- Absorb spillage in inert material and shovel up
- Ventilate the area and wash spill site after material pick-up is complete
- Neutralise with Sodium hypochlorite

6 Accidental release measures (....)

Special Precautions

- Wear protective clothing as per section 8

7 Handling and storage

Handling

- Wear protective clothing as per section 8
- Eyewash bottles should be available

Storage

- Keep only in the original container in a cool, well ventilated place (S3/9/49)
- Keep container tightly closed (S7)

8 Exposure controls and personal protection

Exposure Limits

- TLV (TWA) 0.01 ppm (Hydrazine)

Exposure controls

- The undiluted product must not be used in a confined space without good ventilation

Occupational exposure controls

- Wear suitable protective clothing, including eye/face protection and gloves (plastic or rubber are recommended)
- Wear approved respirator if exposure likely to exceed MEL/OES



9 Physical and chemical properties

- Odour: Smells of ammonia
- Appearance: Liquid, colourless, soluble in water
- pH 12 at 100 % concentration, pH 9 - 10 at 1 % concentration
- Boiling point 102 °C at 760 mm /Hg
- Vapour pressure 20 mbar at 20 deg C
- Vapour density - not applicable
- Freezing point -14 °C at 760 mm/Hg
- Completely soluble in water
- Specific gravity (water=1) 1.01
- Non combustible

10 Stability and reactivity

- This article is considered stable under normal conditions
 - Avoid overheating
 - Incompatible with acid, Incompatible with strong oxidizing substances
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11 Toxicological information

Toxicological information

- LD50 (oral,rat) 60 mg/kg
- LC50 (inhalation,rat) 0.75 mg/l/4h
- Both values apply to anhydrous Hydrazine (N₂H₄)

Inhalation

- In cases of severe exposure, severe irritation may develop

Contact with skin

- Prolonged skin or eye contact may cause chemical burns

Contact with eyes

- Prolonged skin or eye contact may cause chemical burns

Ingestion

- Can cause damage to the digestive system

Carcinogenicity

- Category 2 Carcinogen
 - Animal tests conducted under conditions comparable with the workplace situation have shown the substance to be carcinogenic.
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12 Ecological information

Ecotoxicity

- May cause acute effects in the aquatic environment

Mobility

- Completely soluble in water

Persistence and Biodegradability

- Degrades rapidly on exposure to air

Bioaccumulation Potential

- Bioaccumulation of the components in this product is insignificant.

Other Adverse Effects

- No environmental problems are expected when the product is used / handled correctly.

In its intended use, the product will not be released into the environment.

- Presents little or no hazard to the aquatic environment
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13 Disposal considerations

Classification

- EU Waste class: 06.02
- This material and/or its container must be disposed of as hazardous waste

Disposal considerations

- Do not discharge into drains or the environment, dispose to an authorised waste collection point
- Disposal should be in accordance with local, state or national legislation

14 Transport information



Toxic

UN

Proper Shipping Name: UN No.:	Hydrazine, aqueous solution, with not more than 37% hydrazine 3293		
Hazard Class:	6.1	Packing Group:	III

Road/Rail (ADR/RID)

Proper Shipping Name: ADR UN No.:	Hydrazine, aqueous solution, with not more than 37% hydrazine 3293		
ADR Hazard Class:	6.1	Tremcard:	61GT4-II

Sea (IMDG)

Proper Shipping Name: IMDG UN No.:	Hydrazine, aqueous solution, with not more than 37% hydrazine 3293		
IMDG Hazard Class.:	6.1	IMDG Pack Group.:	III
IMDG EmS:	F-A, S-A	IMDG subrisk:	N/A
IMDG labels:	6.1	IMDG Flashpoint:	N/A

Air (ICAO/IATA)

Proper Shipping Name: ICAO Un No.:	Hydrazine, aqueous solution, with not more than 37% hydrazine 3293		
ICAO Hazard Class.:	6.1	ICAO Packing Group.:	III
ICAO subrisk:	N/A	ICAO Labels:	6.1
ICAO Flashpoint:	N/A		

14 Transport information (....)

DOT / CFR (US Department of Transportation)

DOT Proper Shipping Name: Hydrazine, aqueous solution, with not more than 37% hydrazine
 Hazardous Material: Hydrazine

Hazard Class: 6.1 Identification Number: UN 3293

Product RQ (lbs): 1 DOT subrisk: N/A

DOT labels: 6.1 DOT Flashpoint: N/A

15 Regulatory information



Toxic

Risk Phrases

- May cause cancer (R45)
- Harmful by inhalation, in contact with skin and if swallowed (R20/21/22)
- Causes burns (R34)
- May cause sensitisation by skin contact (R43)
- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R51/53)

Safety Phrases

- Avoid exposure - obtain special instructions before use (S53)
- Wear suitable protective clothing, eye/face protection and gloves (S36/37/39)
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) (S45)
- Avoid release to the environment. Refer to special instructions/Safety data sheets (S61)

16 Other information

(R23/24/25: Toxic by inhalation, in contact with skin and if swallowed. R34: Causes burns. R45: May cause cancer. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.)

The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents

The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties

The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer

This Safety Data Sheet is provided in compliance with The Dangerous Substances Directive (67/548/EEC)

This Safety Data Sheet is provided in compliance with The Dangerous Preparations Directive (88/379/EEC)

This Safety Data Sheet is provided in compliance with The Safety Data Sheets Directive (2001/58EC)