

# HYDROGEN PEROXIDE 20 %

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 2/23/2024 Revision date: 2/23/2027

Version: 1.2



### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	: Substance
Trade name	: HYDROGEN PEROXIDE 20 %
Chemical name	: Hydrogenperoxide ....solution %
EC Index-No.	: 008-003-00-9
EC-No.	: 231-765-0
CAS-No.	: 7722-84-1
REACH registration No.	: 01-2119485845-22
Product code	: HYDROGEN PEROXIDE 20 %
Product group	: Trade product

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

No additional information available

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

ImproChem(Pty) Ltd T/A AECI Water  
1 Wharhirst Road  
Umbogintwini - South Africa  
T +27(31) 949 8200

#### 1.4. Emergency telephone number

Emergency number : 0800 SPILLS or 0800 774557

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidising Liquids, Category 1	H271
Acute toxicity (oral), Category 4	H302
Acute toxicity (inhal.), Category 4	H332
Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335

Full text of H- and EUH-statements: see section 16

Specific concentration limits:

(5 ≤ C < 8)	Eye Irrit. 2, H319
(8 ≤ C < 50)	Eye Dam. 1, H318
(35 ≤ C < 100)	STOT SE 3, H335
(35 ≤ C < 50)	Skin Irrit. 2, H315
(50 ≤ C < 70)	Skin Corr. 1B, H314
(50 ≤ C < 70)	Ox. Liq. 2, H272
(70 ≤ C < 100)	Skin Corr. 1A, H314
(70 ≤ C < 100)	Ox. Liq. 1, H271

#### Adverse physicochemical, human health and environmental effects

May cause fire or explosion; strong oxidiser. Harmful if inhaled. Harmful if swallowed. May cause respiratory irritation. Causes severe skin burns and eye damage. Causes skin irritation. Causes serious eye damage.

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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS03

GHS05

GHS07

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H271 - May cause fire or explosion; strong oxidiser.  
H302+H332 - Harmful if swallowed or if inhaled  
H314 - Causes severe skin burns and eye damage.  
H335 - May cause respiratory irritation.

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P221 - Take any precaution to avoid mixing with combustibles.  
P280 - Wear goggles, gloves, clothing and respiratory protection  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

### 2.3. Other hazards

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%
HYDROGEN PEROXIDE 20 %	(CAS-No.) 7722-84-1 (EC-No.) 231-765-0 (EC Index-No.) 008-003-00-9 (REACH-no) 01-2119485845-22	100

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Treat symptomatically. Get immediate medical attention.
First-aid measures after skin contact	: Rinse skin with water/shower. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Burns. Irritation.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: May cause fire or explosion; strong oxidiser.
Explosion hazard	: Heat may cause pressure rise in tanks/drums: explosion risk.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

### 5.3. Advice for firefighters

Firefighting instructions	: In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: High temperature decomposition products are harmful by inhalation.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid contact with skin, eyes and clothing. Ventilate area. Remove ignition sources. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Do not handle until all safety precautions have been read and understood. Evacuate area.
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#### 6.1.1. For non-emergency personnel

Protective equipment	: Wear full protective clothing and breathing apparatus when dealing with all spillage (see section 8).
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

#### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment	: Dam up the liquid spill.
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable. Keep away from combustible materials. Keep away from ignition sources.
Precautions for safe handling	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Ensure adequate ventilation, especially in confined areas. Facilities: shower, eye shower.
Storage conditions	: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Incompatible products	: Heavy metals. Strong reducing agents. Iron. alkalis. organic materials.
Incompatible materials	: Aluminium, Zinc, Galvanised metals. combustible materials.
Heat and ignition sources	: Keep away from heat and direct sunlight. Keep away from ignition sources.

### 7.3. Specific end use(s)

No additional information available

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### HYDROGEN PEROXIDE 20 % (7722-84-1)

###### United Kingdom - Occupational Exposure Limits

Local name	Hydrogen peroxide
WEL TWA (OEL TWA) [1]	1.4 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	1 ppm
WEL STEL (OEL STEL)	2.8 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	2 ppm

###### USA - ACGIH - Occupational Exposure Limits

Local name	Hydrogen peroxide
ACGIH OEL TWA [ppm]	1 ppm
Remark (ACGIH)	Eye, URT, & skin irr

DNEL : 1.4 mg/m<sup>3</sup>

HYDROGEN PEROXIDE 20 % (7722-84-1)		
United Kingdom	Local name	Hydrogen peroxide
United Kingdom	WEL TWA (OEL TWA) [1]	1.4 mg/m <sup>3</sup>
United Kingdom	WEL TWA (OEL TWA) [2]	1 ppm
United Kingdom	WEL STEL (OEL STEL)	2.8 mg/m <sup>3</sup>
United Kingdom	WEL STEL (OEL STEL) [ppm]	2 ppm
USA - ACGIH	Local name	Hydrogen peroxide
USA - ACGIH	ACGIH OEL TWA [ppm]	1 ppm
USA - ACGIH	Remark (ACGIH)	Eye, URT, & skin irr
USA - OSHA	Local name	Hydrogen peroxide
USA - OSHA	OSHA PEL TWA [1]	1.4 mg/m <sup>3</sup>
USA - OSHA	OSHA PEL TWA [2]	1 ppm

DNEL : 1.4 mg/m<sup>3</sup>

#### 8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: Protective goggles. Face shield. Gloves, shoulder length. Insufficient ventilation: wear respiratory protection. Protective clothing. Apron. Safety Boots.
Hand protection	: Shoulder-length gloves - EN 388, EN 374, EN 374-3, PVC C400
Eye protection	: Spoggles (not safety glasses) - EN166, UVEX, Pyramex Capstone . Face shield
Skin and body protection	: Full conti-suit/overall (Jacket and pants) - Acid resistant and flame retardant with reflective stripes - SANS 434, EN 471, EN 469, EN 533. Chemical resistant apron
Respiratory protection	: [In case of inadequate ventilation] wear respiratory protection.



Environmental exposure controls : Avoid release to the environment.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Molecular mass	: 34.015 g/mol
Colour	: Clear colourless.

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Odour	: Odourless.
Odour threshold	: No data available
pH	: $\leq 3.7$
Relative evaporation rate (butylacetate=1)	: $> 1$
Melting point	: $-33\text{ }^{\circ}\text{C}$ Not applicable
Freezing point	: No data available
Boiling point	: $108\text{ }^{\circ}\text{C}$
Flash point	: $> 93\text{ }^{\circ}\text{C}$
Auto-ignition temperature	: No data available
Decomposition temperature	: $100\text{ }^{\circ}\text{C}$
Flammability	: Not applicable
Vapour pressure	: $299.25\text{ Pa}$
Relative vapour density at $20^{\circ}\text{C}$	: No data available
Relative density	: No data available
Density	: $1.13\text{ @ }20\text{ }^{\circ}\text{C}$
Solubility	: Miscible with water. Water: $1000000\text{ mg/l}$
Partition coefficient n-octanol/water (Log Pow)	: $0.032$
Viscosity, kinematic	: $1.1\text{ cSt @ }20\text{ }^{\circ}\text{C}$
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: Oxidiser.
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

May cause fire or explosion; strong oxidiser.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Avoid contact with organic compounds. Contact with metals, metallic ions, alkalis, reducing agents and organic materials may produce self accelerated thermal decomposition.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Exposure to UV rays, contamination, pH variations.

### 10.5. Incompatible materials

Combustible materials.

### 10.6. Hazardous decomposition products

Oxygen which supports combustion. Liable to overpressure in container.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed or in contact with skin. Harmful if inhaled.

HYDROGEN PEROXIDE 20 % (7722-84-1)	
LD50 oral rat	$> 225\text{ mg/kg (50\% Solution)}$
LC50 Inhalation - Rat (Dust/Mist)	$> 170\text{ mg/m}^3$

Skin corrosion/irritation	: Causes severe skin burns. Causes skin irritation. pH: $\leq 3.7$
Serious eye damage/irritation	: Corrosive to eyes pH: $\leq 3.7$
Respiratory or skin sensitisation	: May cause respiratory irritation.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

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Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

### HYDROGEN PEROXIDE 20 % (7722-84-1)

Viscosity, kinematic	1.1 mm <sup>2</sup> /s @ 20 C
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## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

### HYDROGEN PEROXIDE 20 % (7722-84-1)

LC50 - Fish [1]	16.4 mg/l
LC50 - Fish [2]	32 mg/l (Oncorhynchus mykiss)
EC50 - Crustacea [1]	2.4 mg/l (Daphnia magna)
EC50 - Crustacea [2]	7.7 mg/l (Daphnia pulex)
EC50 - Other aquatic organisms [1]	7.7 mg/l
EC50 - Other aquatic organisms [2]	IC50 algae (72 h) mg/l
EC50 72h - Algae [1]	1.38 mg/l (Skeletonema costatum)

### 12.2. Persistence and degradability

### HYDROGEN PEROXIDE 20 % (7722-84-1)

Persistence and degradability	Inherently biodegradable.
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### 12.3. Bioaccumulative potential

### HYDROGEN PEROXIDE 20 % (7722-84-1)

Partition coefficient n-octanol/water (Log Pow)	0.032
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### 12.4. Mobility in soil

### HYDROGEN PEROXIDE 20 % (7722-84-1)

Ecology - soil	Mobile.
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### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No. (ADR)	: 2014
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Transport document description (ADR)	: UN 2014

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	: Not applicable
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#### IMDG

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Transport hazard class(es) (IMDG) : Not applicable

### IATA

Transport hazard class(es) (IATA) : Not applicable

#### 14.4. Packing group

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

#### 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

#### 14.6. Special precautions for user

##### - Overland transport

No data available

##### - Transport by sea

No data available

##### - Air transport

No data available

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

Not listed on REACH Annex XVII

Not listed on the REACH Candidate List

Not listed on REACH Annex XIV (Authorisation List)

#### 15.1.2. National regulations

##### Germany

Regulatory reference : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 288)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the 12. BImSchV (Hazardous Incident Ordinance)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

##### Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

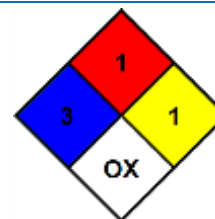
## SECTION 16: Other information

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NFPA health hazard	: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.
NFPA fire hazard	: 1 - Materials that must be preheated before ignition can occur.
NFPA reactivity	: 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.
NFPA specific hazard	: OX - Materials that posses oxidizing properties.



### Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H271	May cause fire or explosion; strong oxidiser.
H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
Ox. Liq. 1	Oxidising Liquids, Category 1
Ox. Liq. 2	Oxidising Liquids, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

### SDS ImproChem Test

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