
MATERIAL SAFETY DATA SHEET

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

1.1 Product identifiers

Product name: Testing solution 57 Hydrogen peroxide 1.5%

Product Code: TS57

CAS-No. 7722-84-1

Brand: Solmedia Ltd

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

Identified uses	Testing Reagent
-----------------	-----------------

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Solmedia Ltd.
- Address of Supplier: Unit 2, Vernon Drive
Battlefield Enterprise Park
Shrewsbury
SY1 3TF
UK
- Telephone: 0844 80 80 900
- Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone # +44 (0)844 80 80 900

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

2.2 Label elements

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

According to EC directives or the corresponding national regulations the product does not have to be labelled.

2.3 Other hazards

PBT: This substance is not identified as a PBT substance.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

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

		Classification (Regulation (EC) No 1272/2008 [CLP])		
Hazardous Components		Amount [%]	Hazard class/ Hazard category	Hazard Statements
Name:	Hydrogen Peroxide	<2%	OX. LIQ. CAT. 1 ACUTE TOX. CAT 4 SKIN. CORR. CAT 1A	H271, H302, H332, H314
CAS NO.	7722-84-1			
EC-NO.	231-765-0			
EU REACH-REG. NO.	01-2119485845- 22-XXXX			
Name:	Deionised water	>98%	N/A	N/A
CAS NO.	7732-18-5			
EC-NO.	231-791-2			

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

4.5 Information to physician

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media for the surrounding fire should be used.

The product itself does not burn.

Co-ordinate fire-fighting measures to the fire surroundings.

Extinguishing media which must not be used for safety reasons

No restriction.

5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated:
Pyrolysis products, toxic.

5.3 Advice for firefighters

Do NOT fight fire when fire reaches explosives.
Special protective equipment for firefighters.
Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Do not allow run-off from fire-fighting to enter drains or water courses.
Do not inhale explosion and combustion gases.
Use water spray jet to protect personnel and to cool endangered containers.
In case of fire: Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

In case of major fire and large quantities: Remove persons to safety.

6.2 Environmental precautions

Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal.

6.4 Additional information

Clear spills immediately.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid: Inhalation. Avoid contact with skin and eyes. Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Protect from moisture.

7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: 15-25°C

Storage class: 10-13

Keep container tightly closed and in a well-ventilated place. Keep/store away from combustible materials. Due to gaseous decomposition products, overpressure can occur in tightly sealed containers. Container should not be closed gas-tight.

7.3 Specific end use(s)

Specific end use(s): No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredient	Regulatory Information	Country	Limit value type (country of origin)	Limit value
Hydrogen peroxide	Gestis	UK	LTV	1,4mg/m ³ - 1 ppm
Hydrogen peroxide	Gestis	UK	STV	2,8mg/m ³ - 2 ppm

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protective equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique

(Without touching glove's outer surface) to avoid skin contact with this product. Dispose of Contaminated gloves after use in accordance with applicable laws and good laboratory practices.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0.38 mm

Breakthrough time (maximum wearing time): > 480 min

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK

Eye protection:



Goggles recommended during refilling: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Additional Information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Control of environmental exposure

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State:	Liquid
Colour:	Colourless
Odour:	No data available
Odour threshold:	No data available
Safety relevant basic data	
pH:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	Not applicable
Flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	No data available
Solubility(ies)	
Water soluble (g/L):	Miscible
Soluble (g/L) in Ethanol:	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity	
Kinematic viscosity:	No data available
Dynamic viscosity:	No data available
Explosive properties:	Not applicable
Oxidising properties:	Not applicable

9.2 Other safety information

Bulk density:	Not applicable
Refraction index:	No data available
Dissociation constant:	No data available
Surface tension:	No data available
Henry constant:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No data available

10.7 Additional information

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity: Hydrogen peroxide – LD50:< 1193 mg/kg – Rat – (CHP)

Acute inhalation toxicity: Hydrogen peroxide – LC50: 2g/m³ – Rat – (National Library of Medicine ChemID Plus (NLM CIP))

Acute dermal Toxicity: Hydrogen peroxide – LD50: 2000 mg/kg – Rabbit – (IUCLID)

Irritant and corrosive effects

Primary irritation to the skin

Not applicable

Irritation to the eyes

Not applicable

Irritation to respiratory tract

Not applicable

Respiratory or skin sensitisation

In case of skin contact: not sensitising

After inhalation: not sensitising

STOT – single exposure

Not applicable

STOT-repeated exposure

Not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No indication of human carcinogenicity

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist

Reproductive toxicity

No indications of human reproductive toxicity exist

Aspiration hazard

Not applicable

Other adverse effects

No data available

Additional information

No data available

SECTION 12: Ecological information

12.1 Ecotoxicity

Fish toxicity

Hydrogen peroxide – LC50: 24.4mg/l (96 h) – Office of Pesticide Programs 2000. Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)). Environmental Effects Database (EEDB). Environmental Fate and Effects Division, U.S.EPA, Washington, D.C.

Daphnia toxicity

Hydrogen peroxide – EC50: 13.2mg/l (48 h) – Watanabe, H., E. Takahashi, Y. Nakamura, S. Oda, N. Tatarazako, and T. Iguchi 2007. Development of a Daphnia magna DNA Microarray for Evaluating the Toxicity of Environmental Chemicals. Environ.Toxicol.Chem.26(4):669-676

Algae toxicity

Hydrogen peroxide – EC50:3.36mg/l (72 h) – Smit, M.G.D., E. Ebbens, R.G Jak, and M.A.J. Huijbregts 2008. Time and Concentration Dependency in the Potentially Affected Fraction of Species: The Case of Hydrogen Peroxide Treatment of Ballast Water. *Environ.Toxicol.Chem.*27(3):746-753

Hydrogen peroxide – EC50: 5.74mg/l (96 h) – Gregor, J., D. Jancula, and B. Marsalek 2008. Growth Assays with Mixed Cultures of Cyanobacteria and Algae Assessed by In Vivo Fluorescence: One Step Closer to Real Ecosystems? *Chemosphere* 70(10):1873-1878.

Bacteria toxicity

No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product

Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

Appropriate disposal / Package

Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: Transport information

Land transport (ADR/RID)

No dangerous good in sense of this transport regulation.

Sea transport (IMDG)

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU legislation

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Text with EEA relevance)

- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance)

- Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance)

- Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

National regulations

No data available

Water hazard class (WGK): No data available

15.2 Chemical Safety Assessment

No data available

SECTION 16: Other information

Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state

of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.