
MATERIAL SAFETY DATA SHEET

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

1.1 Product identifiers

Product name: Testing Solution No. 114 Zinc Sulphate (0.01M/0.01N) in aqueous solution
0.01M ZINC SULPHATE, Testing solution No. 45 Zinc sulphate 0.005mol/L

Product Number: TS114, 129848150, 129848144

Brand: Solmedia Ltd

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

Identified uses: Test 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

Hazard Class	Hazard Category	Target Organs	Hazard Statement
Irritant	Category 2	Eyes	H319
Hazardous to aquatic environment	Category 3	-	H412

2.2 Label elements

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



Signal word: Warning

Hazard Statements	
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

Precautionary Statements	
P280	Wear protective gloves/protective clothing/eye protection/face protection
P264	Wash thoroughly after handling
P273	Avoid release to the environment
P305 + P351 + P338	IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present, and easy to do.
P337 + P313	If eye irritation persist get medical advice/information
P501	Dispose of contents/container to . . .

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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:	Zinc sulphate monohydrate	≤ 2.5%	ACUTE TOX. CAT. 4.	H302
CAS NO.	7446-19-7		EYE DAM. CAT. 1.	H318
EC-NO.	231-793-3		AQUATIC CHRONIC CAT. 1.	H410
EU REACH-REG. NO.	N/A			

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

The product itself does not burn

Co-ordinate fire-fighting measures to the fire surroundings

Extinguish 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

5.4 Further 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

Avoid breathing vapours, mist or gas.

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

For personal protection see section 8.

6.2 Environmental precautions

Discharge into the environment must be avoided

6.3 Methods and materials for containment and cleaning up

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

6.4 Reference to other sections

Clear Spills immediately

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible: Inhalation skin contact, eye contact, 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.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Keep/store only in original container.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

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.

8.2.2 Personal protective equipment

Eye/face protection

Eye glasses with side protection DIN-/EN-Norms: DIN EN 166

Recommendation: VWR 111-0432

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Recommend glove articles DIN-/EN-NORMS: DIN EN 374 in the case of wanting to use the gloves again, clean them before taking off and air them well.

Body Protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Suitable respiratory protection apparatus: Full/half/quarter face masks (DIN136/140)

Control of environmental exposure

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 conspicuously.

8.2.3 Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid, clear

Colour: no data available

b) Odour No data available

c) Odour Threshold No data available

Safety relevant basis data

d) pH No data available

e) Melting point/freezing point No data available

f) Initial boiling point and boiling range No data available

g) Flash point not applicable

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower flammability or explosive limits No data available

k) Vapour pressure No data available

l) Vapour density – 23 hPa (20°C)

m) Relative density 1.000 g/cm³

n) Water solubility No data available

o) Partition coefficient: octanol/water No data available

p) Auto-ignition temperature

No data available

q) Decomposition temperature No data available

r) Viscosity No data available

s) Explosive properties No data available

t) Oxidizing properties No data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

Primary irritation to the skin

Serious eye damage/eye irritation

Causes serious eye irritation

Respiratory or skin sensitisation

In case of skin contact: not sensitising. After inhalation: not sensitising

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

SECTION 12: Ecological information

12.1 Toxicity

Fish toxicity: Zinc sulphate monohydrate – LC50: 4mg/l (96 h)

Daphnia toxicity: Zinc sulphate monohydrate – EC50: 0.79 mg/l (48 h)

Zinc sulphate monohydrate – LC50: 1.2 mg/l (48 h)

Algae toxicity: Zinc sulphate monohydrate – EC50: 0.22 mg/l (72 h)

Bacteria toxicity: EC50 – 5.2 mg/l

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

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

Land transport (ADR/RID) – No dangerous goods in sense of this transport regulation

Sea transport (IMDG) – No dangerous goods in sense of this transport regulation

Air transport (ICAO-TI/IATA-DGR) – No dangerous goods in sense of this transport regulation

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 as amended by Regulation (EU) 2015/830.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

Further information

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.