
MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name: TESTING SOLUTION 45
Trade Name: Zinc sulphate Solution 0.005 mol/l.
Product Code: TS45
CAS No: 7733-02-0
Brand: Solmedia Ltd

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

Identified uses: General chemical 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 according to Regulation (EC) No. 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard Statements
Eye irritation, category 2	H319
Hazardous to the aquatic environment, chronic, category 3	H412

2.2 Label elements

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

Hazard pictograms: GHS07 Exclamation mark



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. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P501: Dispose of contents/container to an approved waste disposal plant.

2.3 Other hazards

None

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]

Substance Name	Concentration	Product Identifier	Hazard classes and Hazard Categories
Zinc sulphate monohydrate	0.10 - < 2.5%	CAS No.: 7446-19-7 EC No: 231-793-3 REACH No.: Not yet communicated down the supply chain.	Acute Tox. 4 - H302 Eye Dam. 1 - H318 Aquatic Chronic 1 - H410

SECTION 4: First aid measures

4.1 Description of first aid measures

IF exposed or if you feel unwell: Call a POISON CENTRE or doctor/physician. 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

Call a POISON CENTRE/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

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.

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.

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

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 Reference to other sections

Clear spills immediately.

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.

7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature:

no data available

Storage class:

no data available

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

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2 Exposure controls

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 protection equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn.

Eye/face protection

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

Skin protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.
Recommended 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.

By short-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,12 mm

Breakthrough time (maximum wearing time): > 480 min

By long-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,12 mm

Breakthrough time (maximum wearing time): > 480 min

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Suitable respiratory protection apparatus: Full-/half-/quarter-face masks (DIN EN 136/140)

Suitable material: ABEK2P3

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.

Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****a) Appearance****Physical state:** liquid**Colour:** no data available**(b) Odour:** no data available**(c) Odour threshold:** no data available**(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: no data available

(h) Evaporation rate: no data available

(i) Flammability (solid, gas):

not applicable

(j) Flammability or explosive limits

Lower explosion limit: no data available

Upper explosion limit: no data available

(k) Vapour pressure: 23 hPa (20 °C)

(l) Vapour density: no data available

(m) Relative density: no data available

(n) Solubility(ies)

Water solubility (g/L): no data available

Soluble (g/L) in Ethanol:

no data available

(o) Partition coefficient: n-octanol/water:

no data available

(p) Auto-ignition temperature:

no data available

(q) Decomposition temperature:

no data available

(r) Viscosity

Kinematic viscosity: no data available

Dynamic viscosity: no data available

(s) Explosive properties:

not applicable

(t) 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 effects

Acute oral toxicity: Zinc sulphate monohydrate - LD50: > 2949 mg/kg - Rat - (IUCLID)

Acute dermal toxicity: No data available

Acute inhalation toxicity:

No data available

Irritant and corrosive effects

Primary irritation to the skin:

Not applicable

Irritation to eyes: Causes serious eye irritation.

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 Toxicity

Fish toxicity:

Zinc sulphate monohydrate – LC50: 4 mg/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:

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.

Additional information

No data available

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

15.2 Chemical safety assessment

No data available

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.