

SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: Testing Solution No.77
- Contains methenamine/hexamethylenetetramine
- Product Description: hexamine/acetic acid
- Product Part Number: TS77
129872144

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

- Use of the substance/mixture: Test reagent
- Use advised against: No information available

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Solmedia Limited
- Address of Supplier: Unit 2, Vernon Drive
Battlefield Enterprise Park
Shrewsbury
SY1 3TF
UK
- Telephone: 0844 8080 900
- Email: Labsupplies@solmedialtd.com

1.4 Emergency telephone number

- Emergency Telephone: 0844 8080 909 (24hr)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Skin Sens. 1, H317
- Additional information: For full text of Hazard- and EU Hazard-statements: see section 16

2.2 Label elements



- Signal Word: Warning
- Hazard statements
H317 - May cause an allergic skin reaction.
- Precautionary statements
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents/container to an authorised waste collection point
- Supplemental Hazard Information (EU)
None

SECTION 2: Hazards identification (....)

2.3 Other hazards

- Heating can release vapours which can be ignited
 - Not a PBT according to REACH Annex XIII
 - Not a vPvB according to REACH Annex XIII
-

SECTION 3: Composition/information on ingredients

3.1 Substances

3.2 Mixtures

- methenamine; hexamethylenetetramine
Concentration: 10 - 25%
CAS Number: 100-97-0
EC Number: 202-905-8
Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Flam. Sol. 2, H228; Skin Sens. 1, H317
 - acetic acid ... %
Concentration: <10%
CAS Number: 64-19-7
EC Number: 200-580-7
Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Flam. Liq. 3, H226; Skin Corr. 1A, H314
Substance with a workplace exposure limit, see Section 8
-

SECTION 4: First aid measures

4.1 Description of first aid measures

- Contact with eyes
If substance has got into eyes, immediately wash out with plenty of water for several minutes
Irrigate eyes thoroughly whilst lifting eyelids
Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
- Contact with skin
Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
Gently wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
- Ingestion
Rinse mouth.
Give plenty of water to drink
Do NOT induce vomiting.
Never give anything by mouth to an unconscious person
Get immediate medical advice/attention.
- Inhalation
If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Keep warm and at rest, in a half upright position. Loosen clothing
Get immediate medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

- Contact with eyes
May cause redness and irritation
May cause blurred vision
-

SECTION 4: First aid measures (....)

- Contact with skin
May cause an allergic skin reaction.
May cause skin sensitisation. Stop using product if skin sensitisation occurs.
- Ingestion
May cause gastro-intestinal irritation
May cause nausea/vomiting
May cause diarrhoea
- Inhalation
May cause respiratory irritation
May cause breathing difficulty

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically
-

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- In case of fire use water spray or fog, alcohol resistant foam, dry chemical or carbon dioxide
- Unsuitable extinguishing media: high volume water jet
- Use water to cool containers exposed to fire.

5.2 Special hazards arising from the substance or mixture

- Gives off irritating or toxic fumes (or gases) in a fire.
- Vapours may ignite

5.3 Advice for firefighters

- Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.
 - Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.
-

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Personal precautions for non-emergency personnel: Ensure adequate ventilation; Avoid contact with skin and eyes; Avoid breathing vapours, mist or gas; Wear protective clothing as per section 8; Wash thoroughly after handling.
- Personal precautions for emergency responders: Evacuate the area and keep personnel upwind; Avoid contact with skin and eyes; Avoid breathing vapours, mist or gas; Wear chemical protection suit; Wear self-contained breathing apparatus (SCBA).

6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses

6.3 Methods and material for containment and cleaning up

- Stop leak if safe to do so.
- Contain the spillage using bunding
- Absorb spillage in inert material and shovel up
- Place in appropriate container
- Seal containers and label them
- Remove contaminated material to safe location for subsequent disposal
- To be disposed of as hazardous waste

6.4 Reference to other sections

- See section(s): 7, 8 & 13
-

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Keep away from heat and sources of ignition
- Avoid breathing vapours, mist or gas
- Do not get in eyes, on skin, or on clothing.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves
- Contaminated clothing should be laundered before reuse
- Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

- Store in a well-ventilated place. Keep container tightly closed.
- Keep only in the original container
- Keep container dry
- Keep away from oxidisers, heat, flames or ignition sources
- Store at ambient temperature
- Keep away from acid
- Incompatible with peroxides
- Incompatible with halogenated substances

7.3 Specific end use(s)

- Test reagent
-

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

- methenamine; hexamethylenetetramine
No exposure limits have been set for this substance
DNEL (inhalational) 5.6 mg/m³ Industry, Long Term, Systemic Effects
DNEL (dermal) 6.4 mg/kg (bw/day) Industry, Long Term, Systemic Effects
DNEL (inhalational) 1.2 mg/m³ Consumer, Long Term, Systemic Effects
DNEL (dermal) 3.2 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
DNEL (oral) 800 µg/kg (bw/day) Consumer, Long Term, Systemic Effects
PNEC aqua (freshwater) 3 mg/l
PNEC aqua (intermittent releases) (freshwater) 30 mg/l
PNEC aqua (marine water) 300 µg/l
PNEC (STP) 100 mg/l
PNEC sediment (freshwater) 10.2 mg/kg
PNEC sediment (marine water) 1.02 mg/kg
PNEC terrestrial (soil) 280 µg/kg
- acetic acid ... %
(EU) OELV (long term TWA) 10 ppm 25 mg/m³
(EU) OELV (short term limit value) 20 ppm 50 mg/m³
DNEL (inhalational) 25 mg/m³ Industry, Long Term, Local Effects
DNEL (inhalational) 25 mg/m³ Industry, Acute/Short Term, Local Effects
DNEL (inhalational) 25 mg/m³ Consumer, Long Term, Local Effects
DNEL (inhalational) 25 mg/m³ Consumer, Acute/Short Term, Local Effects
PNEC aqua (freshwater) 3.058 mg/l
PNEC aqua (intermittent releases) 30.58 mg/l
PNEC aqua (marine water) 305.8 µg/l
PNEC (STP) 85 mg/l
PNEC sediment (freshwater) 11.36 mg/kg
PNEC sediment (marine water) 1.136 mg/kg
PNEC terrestrial (soil) 470 µg/kg

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection (....)

- Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines
- In case of inadequate ventilation wear respiratory protection.
- Respiratory protection: Particle filter P2
- Wear suitable protective clothing, including eye/face protection and gloves (neoprene or nitrile are recommended)
- The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.
- Wear safety glasses approved to standard EN 166.
- Use good personal hygiene practices
- Wash thoroughly after handling.



SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

- Appearance: Liquid; colourless
- Odour: None
- Odour threshold: No information available
- pH: 5.0 - 6.0 at 20.0 °C (undiluted)
- Melting point/freezing point: < -7.0 °C
- Initial boiling point and boiling range: No information available
- Flashpoint: Not applicable
- Evaporation Rate: No information available
- Flammability (solid,gas): Not applicable
- Upper/lower flammability or explosive limits: Not applicable
- Vapour Pressure: No information available
- Vapour Density: No information available
- Relative Density: 1.06 – 1.1 g/cm³ @ 20.0 °C
Method: DIN 51757
- Solubility(ies): Completely soluble in water
- Partition Coefficient (n-Octanol/Water): Log Pow: (methenamine) -2.18 to -2 @ 20 °C and pH 7 - 9
- Autoignition Temperature: No information available
- Decomposition temperature: >290 °C
- Viscosity: Ca.15.0 sec Ø 4mm @ 20.0 °C
Method: ISO 2431
- Explosive Properties: No information available
- Oxidising properties: No information available

9.2 Other information

- No information available

SECTION 10: Stability and reactivity**10.1 Reactivity**

- No decomposition if stored normally.

10.2 Chemical stability

- Stable under normal conditions

SECTION 10: Stability and reactivity (....)

10.3 Possibility of hazardous reactions

- Reacts violently with peroxides. Risk of explosion.

10.4 Conditions to avoid

- Avoid overheating
- Heating can release vapours which can be ignited

10.5 Incompatible materials

- Incompatible with acid
- Incompatible with oxidizing substances
- Incompatible with peroxides
- Incompatible with halogenated hydrocarbons

10.6 Hazardous decomposition products

- Decomposition products may include hydrogen cyanide (HCN), ammonia, formaldehyde vapours, nitrogen oxides (NOx), carbon monoxide and carbon dioxide
-

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute Toxicity
Based on available data, the classification criteria are not met
LD50 (oral, rat) (methenamine) 20 000 mg/kg bw
LD50 (dermal, rat) (methenamine) 2 000 mg/kg bw
LD50 (oral, rat) (acetic acid) 3 310 mg/kg bw
LC50 (inhalation, rat) (acetic acid) 8.5 - 12.7 mg/l/4h
- Skin corrosion/irritation
Based on available data, the classification criteria are not met
- Serious eye damage/irritation
Based on available data, the classification criteria are not met
- Respiratory or skin sensitisation
May cause an allergic skin reaction.
- Germ cell mutagenicity
No evidence of mutagenic effects
- Carcinogenicity
No evidence of carcinogenic effects
- Reproductive toxicity
No evidence of reproductive effects
- Specific target organ toxicity (STOT) - single exposure
Based on available data, the classification criteria are not met
- Specific target organ toxicity (STOT) - repeated exposure
Based on available data, the classification criteria are not met
- Aspiration hazard
No information available
- Contact with eyes
May cause redness and irritation
May cause blurred vision
- Contact with skin
May cause allergic reaction in susceptible people
May cause skin sensitisation. Stop using product if skin sensitisation occurs.
- Ingestion
May disturb the central nervous system
May cause gastro-intestinal irritation

Revision: 7 April 2018

SECTION 11: Toxicological information (....)

- May cause nausea/vomiting
 - May cause diarrhoea
 - Inhalation
 - May cause respiratory irritation
 - May cause breathing difficulty
-

SECTION 12: Ecological information**12.1 Toxicity**

- Based on available data, the classification criteria are not met
- methenamine; hexamethylenetetramine
 - LC50 (fish) 41 - 49 g/l (4 days)
 - LC50 (aquatic invertebrates) 36 g/l (48 hr)
 - EC50 (aquatic algae) 3 g/l (14 days)
- acetic acid ... %
 - LC50 (fish): 300.82 - 1 000 mg/l (4 days)
 - EC50 (aquatic invertebrates) 300.82 - 1 000 mg/l (48 hr)
 - EC50 (aquatic algae) 300.82 - 1 000 mg/l (72 hr)

12.2 Persistence and degradability

- No information available

12.3 Bioaccumulative potential

- No information available

12.4 Mobility in soil

- Soluble in water

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

12.6 Other adverse effects

- To the best of our knowledge, the ecological properties of this material have not been fully evaluated.
-

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

- 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
- This material and/or its container must be disposed of as hazardous waste
- Do not reuse empty containers without commercial cleaning or reconditioning

13.2 Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)
-

SECTION 14: Transport information

Not classified as hazardous for transport

14.1 UN number

- UN No.: Not applicable

14.2 UN proper shipping name

SECTION 14: Transport information (....)

- Proper Shipping Name: Not applicable
 - 14.3 Transport hazard class(es)
 - Hazard Class: Not applicable
 - 14.4 Packing group
 - Packing Group: Not applicable
 - 14.5 Environmental hazards
 - Not Classified
 - 14.6 Special precautions for user
 - Not Classified
 - 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
 - Not Classified
 - 14.8 Road/Rail (ADR/RID)
 - Proper Shipping Name: Not applicable
 - ADR UN No.: Not applicable
 - ADR Hazard Class: Not applicable
 - ADR Packing Group: Not applicable
 - Tunnel Code: Not applicable
 - 14.9 Sea (IMDG)
 - Proper Shipping Name: Not applicable
 - IMDG UN No.: Not applicable
 - IMDG Hazard Class: Not applicable
 - IMDG Pack Group.: Not applicable
 - 14.10 Air (ICAO/IATA)
 - Proper Shipping Name: Not applicable
 - ICAO UN No.: Not applicable
 - ICAO Hazard Class: Not applicable
 - ICAO Packing Group: Not applicable
-

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 - This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 as amended by Regulation (EU) 2015/830
 - Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe
 - 15.2 Chemical safety assessment
 - A REACH chemical safety assessment has not been carried out
-

SECTION 16: Other information

The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.

Revision No. 2.0.0. Revised January 2018.

Changes made: Revised to conform to latest version REACH Annex II and CLP.

Revision: 7 April 2018

SECTION 16: Other information (....)

Revision No. 2.1.0. Revised April 2018.

Changes made: Product code added to subsection 1.1

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Sens. 1, H317: Classification based on calculation and concentration thresholds

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

- H226: Flammable liquid and vapour
- H228: Flammable solid
- H314: Causes severe skin burns and eye damage
- H317: May cause an allergic skin reaction.

--- end of safety datasheet ---
