

SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006.

1. Identification of the substance/mixture and of the company/undertaking
Product identifier:

Sulfanilic acid reagent

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

In vitro laboratory use.

Details of the supplier of the safety data sheet:

ROSCO DIAGNOSTICA ApS

Stensmosevej 24A

Phone: +45 – 93 40 65 65

DK-2620 Albertslund

www.rosco-diagnostica.com

 Responsible person for the safety data sheet (e-mail): info@rosco-diagnostica.com
Emergency telephone:

+45 – 93 40 65 65 (within office hours)

2. Hazards identification
Classification of the substance or mixture:

Corrosive reagent.

EC (67/548 or 1999/45): C;R34

CLP (1272/2008): Skin Corr. 1B;H314

Label elements:
EC:

Content: Acetic acid



Corrosive

R 34: Causes burns.

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contains Sulfanilic acid. May produce an allergic reaction.

Other hazards:

None known. PBT/vPvB: The ingredients are not considered PBT/vPvB according to criteria in Annex XIII.

3. Composition/information on ingredients
Substances: -
Mixtures:

| % w/w | Name | CAS-no. | EC-no. | Index-no. | REACH reg.no. | Classification |
|-------|-----------------|----------|-----------|--------------|---------------|--|
| 0.8 | Sulfanilic acid | 121-57-3 | 204-482-5 | 612-014-00-X | - | EC: Xi;R36/38 R43 CLP: Eye Irrit. 2;H319 Skin Irrit. 2;H315 Skin Sens. 1;H317 |
| 25-30 | Acetic acid | 64-19-7 | 200-580-7 | 607-002-00-6 | - | EC: R10 C;R35 CLP: Flam. Liq. 3;H226 Skin Corr. 1A;H314 |

Wording of R-phrases and hazard statements - see section 16.

4. First-aid measures

Description of first aid measures:

Inhalation: Move the affected person to fresh air. Keep at rest. If symptoms persists: Seek medical advice.

Skin contact: Remove contaminated clothing. Wash skin with water and mild soap. If irritation persists: Seek medical advice.

Eye contact: Immediately flush with water or physiological salt water for at least 15 minutes, holding eye lids open, remember to remove contact lenses, if any. Get medical attention; continue to flush on the way.

Ingestion: Rinse mouth and throat with water. Do not induce vomiting. If vomiting occurs: Keep head down to prevent vomit in the lungs. Seek medical advice immediately.

4. First-aid measures (continued)

Most important symptoms and effects, both acute and delayed:

Corrosion of skin, eyes and mucous membranes with pain, blisters, sores and risk of permanent eye damage.

Inhalation may induce discomfort and oedema (water in the lungs) with symptom (shortness of breath), that might occur several hours after exposure. Prolonged inhalation of vapours may result in inflammation of the nose and gastrointestinal tract, corrosion of the teeth and damage on liver, kidneys, blood or central nervous system.

Indication of any immediate medical attention and special treatment needed:

Show this Safety Data Sheet to a physician or emergency ward.

5. Fire-fighting measures

Extinguishing media:

Carbon dioxide, dry chemical, foam or water fog. Do not use water jet.

Special hazards arising from the substance or mixture:

Do not breathe smoke fumes. In case of fire, the product may form hazardous decomposition products such as oxides of carbon.

Advice for fire-fighters:

When entering burning area: Wear self contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment - see section 8. Avoid spreading. Ventilate area of leak or spill.

Environmental precautions:

Do not empty into drains - see section 12. Inform appropriate authorities in accordance with local regulations.

Methods and material for containment and cleaning up:

Take up with absorbent material or paper. Collect in suitable container. Clean with water. Further handling of spillage - see section 13.

Reference to other sections:

See above.

7. Handling and storage

Precautions for safe handling:

AVOID ALL CONTACT! Avoid breathing vapors. Provide sufficient ventilation. Avoid contact with skin, eyes and clothing. Change contaminated clothes. Wash hands and contaminated areas with water and mild soap after use. There shall be access to water and eye wash fountain.

When diluting with water: The acid must be added to water – NOT water in the acid.

Conditions for safe storage, including any incompatibilities:

Store in a well-closed original container in dry and cool place. Keep out of the reach of children.

Specific end use(s):

See section 1.

8. Exposure controls/Personal protection

Control parameters:

Occupational exposure limits (EH40/2007): Acetic acid: 10 ppm = 25 mg/m³ (Long-term exposure)
 15 ppm = 37 mg/m³ (Short-term exposure)

DNEL/PNEC: No CSR.

Exposure controls:

Appropriate engineering controls: Provide efficient ventilation e.g. by working in a fume cupboard.

Personal protective equipment:

Respiratory protection: Normally not necessary if working in fume cupboard. In case of working in not adequate ventilated areas, use an approved mask with a combined filter: A/E. The filter has a limited lifetime and must be changed. Read the instruction.

Skin protection: Wear protective gloves of e.g. butyl rubber. Breakthrough time: 3 hours. ALTox has reduced the breakthrough time in the glove selection guide with app. a factor 3, since the standard test EN 374-3 is carried out at 23°C, while the temperature in the glove is app. 35°C. Furthermore, elastic gloves are stretched during use, which reduces the glove thickness and thereby also the break through time.

Eye protection: Wear tight fitting safety goggles when risk of splashes.

Environmental exposure controls: None particular.

9. Physical and chemical properties

Information on basic physical and chemical properties:

| | |
|---|---------------------------------------|
| Appearance: | Clear colourless liquid |
| Odour: | Characteristic sharp pungent (acetic) |
| Odour threshold: | No available data |
| pH: | Acidic |
| Melting point/freezing point (°C): | No available data |
| Initial boiling point and boiling range (°C): | No available data |
| Decomposition temperature (°C): | No available data |
| Flash point (°C): | No available data |
| Evaporation rate (water = 1): | No available data |
| Flammability (solid, gas): | Not relevant |
| Upper/lower flammability or explosive limits (vol-%): | No available data |
| Vapour pressure (mmHg, 20°C): | No available data |
| Vapour density (Water = 1): | No available data |
| Relative density (g/ml, 25°C): | < 1 |
| Solubility (water): | Miscible |
| Partition coefficient: n-octanol/water: | No available data |
| Auto-ignition temperature (°C): | No available data |
| Viscosity: | No available data |
| Explosive properties: | Not relevant |
| Oxidising properties: | Not relevant |

Other information:

None relevant.

10. Stability and reactivity

Reactivity:

No available information.

Chemical stability:

Stable under the recommended storage conditions (see section 7).

Possibility of hazardous reactions:

None known.

Conditions to avoid:

Formation of sparks and glows. Excessive heating and sources of ignition.

Incompatible materials:

Reacts strongly with strong alkaline and emits heat. May react strongly with oxidizing agents and metals.

Hazardous decomposition products:

When heated to high temperatures (decomposition) it emits toxic fumes such as oxides of carbon.

11. Toxicological information

Information on toxicological effects:

| Hazard class | Data (Acetic acid) | Test | Reference |
|-----------------------|---|---|------------------------------|
| Acute toxicity: | | | |
| Inhalation | LC ₅₀ (rat) = 11.4 mg/l/4h | No info | IUCLID |
| Dermal | LD ₅₀ (rabbit) = 1060 mg/kg | No info | IUCLID |
| Oral | LD ₅₀ (rat) = 3310 mg/kg | No info | IUCLID |
| Corrosion/irritation: | Strong irritation to corrosion, rabbit | No info | IUCLID |
| Sensitization: | No available data | - | - |
| CMR: | TD _{Lo} (rat, oral) = 5760 mg/kg/32W intermittent: "Equivocal tumorigenic agent" Genotoxic at in vivo test, inhalation TD _{Lo} (nursing female rat, oral) = 700 mg/kg 18d after birth: "Effects on newborn" | No info Drosophila SLRL No info | RTECS IUCLID RTECS |

Information on likely routes of exposure: Lungs, skin and gastrointestinal tract.

Symptoms:

Inhalation: Vapours may cause irritation to the airways. Inhalation of larger amounts may induce discomfort, nausea, dizziness, headache, narcosis and unconsciousness.

Skin: Corrosive with pain, blisters and sores.

Eyes: Corrosive with redness, pain and blurred vision. May induce permanent damage of cornea.

Ingestion: Corrosive to the mucous membranes in mouth, throat and stomach. Symptoms can be nausea, stomach ache, vomiting and headache.

11. Toxicological information (continued)

Chronic

effects: Prolonged or frequent skin contact with diluted acetic acid may cause eczema. Prolonged exposure to acetic acid vapours may result in inflammation of the nose and gastrointestinal tract and corrosion of the teeth surface.

Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system.

12. Ecological information

Toxicity:

| Aquatic | Data (Acetic acid) | Test (Media) | Reference |
|------------|---|--------------|------------|
| Fish | LC ₅₀ (Lepomis macrochirus, 96h) = 75 mg/l | Static (FW) | IUCLID |
| Crustacean | LC ₅₀ (Daphnia magna, 48h) = 65 mg/l | No info (FW) | EPA ecotox |
| Algae | No available data. | - | - |

Persistence and degradability:

Acetic acid: BOD₅ = 66-76 % of ThOD - thus readily biodegradable.

Bioaccumulative potential:

Acetic acid: Log K_{ow} = -0.17 – No significant bioaccumulation is expected.

Mobility in soil:

Acetic acid: K_{oc} ≤ 1 – Very large mobility expected in soil.

Results of PBT and vPvB assessment:

Ingredients are not considered PBT/vPvB according to criteria in Annex XIII.

Other adverse effects:

None known.

13. Disposal considerations

Waste treatment methods:

Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

EWC-Code:

16 05 08 (preparation)

15 02 02 (paper contaminated with product).

14. Transport information

| | | | |
|----------------|---------------------------------|------------------------------------|-----------------------|
| UN-no.: | UN proper shipping name: | Transport hazard class(es): | Packing group: |
| 2790 | ACETIC ACID SOLUTION | 8 | III |

Environmental hazards: None.

Special precautions for user: None.

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

15. Regulatory information

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

Must not be used by persons under 18 years of age.

The employer shall assess the working conditions and, if there is any risk to the safety or health and any effects on the pregnancy or breastfeeding of workers, take the necessary measures to adjust the working conditions (Directive 92/85/EEC).

Chemical Safety Assessment:

No CSR.

16. Other information

CLP label elements (1272/2008):

Content: Acetic acid



Danger

H314: Causes severe skin burns and eye damage.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P30+P311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

EUH208: Contains Sulfanilic acid. May produce an allergic reaction.

R-phrases and hazard statements mentioned in section 2 and 3:

- R 10: Flammable.
R 34: Causes burns.
R 35: Causes severe burns.
R 36/38: Irritating to eyes and skin.
R 43: May cause sensitisation by skin contact.
H226: Flammable liquid and vapour.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.

Abbreviations:

- CMR = Carcinogenicity, mutagenicity and reproductive toxicity
CSR = Chemical Safety Report
EC₅₀ = Effect Concentration 50 %
DNEL = Derived No-Effect Level
FW = Fresh Water
LC₅₀ = Lethal Concentration 50 %
LD₅₀ = Lethal Dosis 50 %
PBT = Persistent, Bioaccumulative, Toxic
PNEC = Predicted No-Effect Concentration
TD_{Lo} = Toxic Dose Low
vPvB = very Persistent, very Bioaccumulative

Litterature:

- IUCLID = International Uniform Chemical Database Information
RTECS = Register of Toxic Effects of Chemical Substances

Training advice:

No special training is required. However, the user should be well instructed in the execution of the task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

Changes since the previous edition:

1-16.

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