

## Material Safety Data Sheets (MSDS)

### Hydrazine Sulphate

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#### Identification of Product

Chemical Code: CHE-H3

Chemical Name: Hydrazine Sulphate

Chemical Grade: AR

Chemical Formula:  $H_4N_2 \cdot H_2SO_4$

Chemical Weight: 130,12 g/mol

CAS No: 10034-93-2

Chemical Synonyms: Hydrazine Sulfate Salt

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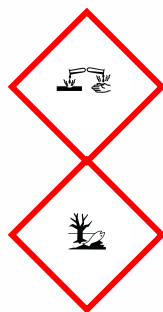
#### Hazards Identification

REACH No: No Data Available

Signal Word: Danger

Supplemental Hazard Information: Restricted to professional users.

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



#### Hazards statements

H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H350 - May cause cancer.

H410 - Very toxic to aquatic life with long lasting effects.

## Precautionary statements

P201 - Obtain special instructions before use.

P261 - Avoid breathing dust.

P273 - Avoid release to the environment.

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

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

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

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## Composition of Chemical

Chemical Formula:  $\text{H}_4\text{N}_2 \cdot \text{H}_2\text{SO}_4$

EC No 1272/2008: No Data Available

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## First Aid Measures

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If: Inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

If: Skin Contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

If: Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If: Swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Important Symptoms: The most important known symptoms and effects are described in the labeling section

Immediate Medical Attention: No Data Available

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## Firefighting Measures

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Hazards Arising: Nitrogen Oxides, Sulphur Oxides

Advice for Firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Info for Firefighting: No Data Available

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## Accidental Release Measures

Personal Precautions: Wear respiratory protection.

Avoid dust formation.

Avoid breathing vapours, mist or gas.

Ensure adequate ventilation.

Evacuate personnel to safe areas.

Avoid breathing dust.

Environmental Precautions: Prevent further leakage or spillage if safe to do so.

Do not let product enter drains.

Discharge into the environment must be avoided.

Method for Containment: Pick up and arrange disposal without creating dust.

Sweep up and shovel.

Keep in suitable, closed containers for disposal.

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## Handling and Storage

Personal Precautions: Avoid contact with skin and eyes.

Avoid formation of dust and aerosols.

Avoid exposure - obtain special instructions before use.

Provide appropriate exhaust ventilation at places where dust is formed.

Environmental Precautions: Store in cool place.

Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

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## Exposure Controls | Personal Protection

Derived No Effect Level (DNEL)

Workers | Application Area | Exposure Routes | Health Effect | Value

No Data Available

Consumers | Application Area | Exposure Routes | Health Effect | Value

No Data Available

Predicted No Effect Concentration (PNEC)

No Data Available

Engineering Controls: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Eye/Face Protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching

gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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 - Material: Nitrile rubber Minimum layer thickness: 0,11 mm

Break through time: 480 min. Material tested: Dermatril®

Splash contact - Material: Nitrile rubber Minimum layer thickness: 0,11 mm

Break through time: 480 min Material tested: Dermatril®

Data source: KCL GmbH, D-36124. Test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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## Physical and Chemical Properties

Appearance: White powder, crystals or chunks

Odour: No Data Available

Odour Threshold: No Data Available

pH: 1,3 at 52 g/l

Melting Point: Melting point/range: 254 °C - lit.

Boiling Point: No Data Available

Flash Point: No Data Available

Evaporation: No Data Available

Flammability: No Data Available

Upper/Lower Flammability or Explosive Limits: No Data Available

Vapour pressure: No Data Available

Vapour density: No Data Available

Relative density: 1,370 g/cm<sup>3</sup>

Water solubility: No Data Available

Partition Coefficient: No Data Available

Auto-ignition Temperature: No Data Available

Decomposition Temperature: No Data Available

Viscosity: No Data Available

Explosive properties: No Data Available

Oxidizing properties: No Data Available

Other Safety Info: No Data Available

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## Stability and Reactivity

Reactivity: No Data Available

Chemical Stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No Data Available

Conditions to Avoid: Can violently decompose at elevated temperatures

Incompatible Materials: Oxidizing agents, Bases

Hazardous Decomposition Products: Other decomposition products - No data available

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## Toxicological Information

Acute Toxicity: LD50 Oral - Rat - 601 mg/kg

Skin Corrosion/Irritation: Severe skin irritation

Serious Eye damage | Eye Irritation: Eyes - Rabbit

Result: Moderate eye irritation - 24 h

Cell Mutagenicity: No Data Available

Carcinogenicity: This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen

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

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## Ecological Information

Ecological Toxicity: No Data Available

Ecological Persistence and degradability: No Data Available

Bioaccumulative Potential: No Data Available

Mobility in Soil: No Data Available

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

Other Adverse Effect: Very toxic to aquatic life with long lasting effects.

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## Disposal Considerations

Waste Treatment Methods: Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging - Dispose of as unused product.

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## Transport Information

UN Number: ADR/RID: 2923

IMDG: 2923

IATA: 2923

UN Shipping Hazard: ADR/RID: CORROSIVE SOLID, TOXIC, N.O.S. (Hydrazinium(2+) sulphate)

IMDG: CORROSIVE SOLID, TOXIC, N.O.S. (Hydrazinium(2+) sulphate)

IATA: Corrosive solid, toxic, n.o.s. (Hydrazinium(2+) sulphate)

Transport Hazard Class: ADR/RID: 8 (6.1)

IMDG: 8 (6.1)

IATA: 8 (6.1)

Packaging Group: ADR/RID: III

IMDG: III

IATA: III

Environmental Hazards: ADR/RID: yes

IMDG Marine pollutant: yes

IATA: no

Special Precautions: No Data Available

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## Regulatory Information

Safety, Health and environmental regulations: Hydrazinium(2+) sulphate: CAS-No.: 10034-93-2

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). Carcinogenic (article 57a) ED/31/2011

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

Chemical Safety Assessment: For this product a chemical safety assessment was not carried out.

Additional Info: RTECS: MV9625000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Cough, Shortness of breath, Headache, Nausea

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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#### Disclaimer

The information stated above is considered to be correct, but does not claim to be inclusive and shall only be used as a guideline. The information provided by this document is confirmed by our continuous updating of knowledge and adheres to the products appropriate safety precautions. It does not represent any guarantee of the product's properties. RLS Chemicals and its Associates shall not be held accountable for any damage's consequent of handling the above product.

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