



Safety Data Sheet

According to Regulation (EC) no. 1907/2006

Product Name
HYDRAZINE SULFATE

1.0 Chemical product and company identification

1.1 Product Identifier

MSDS Name: HYDRAZINE SULFATE
HYDRAZINE DIHYDROGEN SULFATE SALT; HYDRAZINE
HYDROGEN SULFATE; HYDRAZINE MONOSULFATE
Substance name:
CAS No: 10034-93-2
PRODUCT CODE:

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

Use of the Substance / Mixture: LABORATORY CHEMICALS

Recommended restrictions on use: Use only as above

1.3 Details of the supplier of the safety data sheet

Company Identification:
SOLUMETRICS LTD,
UNIT 1B SILEBY ROAD INDUSTRIAL ESTATE. BARROW ON SOAR, LEIC'S. LE12 8LP.
For information call. +44 (0)1509 815348
For emergencies call. +44 (0)1509 815348

2.0 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) no 1272/2008

2.1 Classification of the substance or mixture

ACUTE DERMAL TOXICITY	CATEGORY 3
ACUTE INHALATION TOXICITY - GAS	CATEGORY 3
ACUTE INHALATION TOXICITY - VAPORS	CATEGORY 3
ACUTE INHALATION TOXICITY - DUST AND MISTS	CATEGORY 3
SKIN CORROSION / IRRITATION	CATEGORY 1
SERIOUS EYE DAMAGE / EYE IRRITATION	CATEGORY 1
SKIN SENSITIZATION	CATEGORY 1
CARCINOGENICITY	CATEGORY 1B
ACUTE AQUATIC TOXICITY	CATEGORY 1
CHRONIC AQUATIC TOXICITY	CATEGORY 1

CLASSIFICATION ACCORDING TO EU DIRECTIVES 67/548/EEC OR 1999/45/EC

Hazard Symbol / Category of Danger

H350	MAY CAUSE CANCER
H311	TOXIC IN CONTACT WITH SKIN
H331	TOXIC IF INHALED
H410	VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS
H317	MAY CAUSE AN ALLERGIC SKIN REACTION
H318	CAUSES SERIOUS EYE DAMAGE
H314	CAUSES SEVERE SKIN BURNS AND EYE DAMAGE

Hazard Statements:

Hazard Symbol / Category of Danger

R45	MAY CAUSE CANCER
R43	MAY CAUSE SENSITIZATION BY SKIN CONTACT
R23/24/25	TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED
R50/53	VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT

Risk Phrases

For the full text of the R-Phrases in this section, see Section 16.

2.2 Label Elements

Labelling according to regulation (EC) No 1272/2008

HAZARDS SYMBOLS



Signal Word:

DANGER

Precautionary statements**Prevention**

P280 Wear Protective gloves/ protective clothing/ eye protection/ face protection

P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water
 P301 + P330 + P331 IF SWALLOWED : Rinse Mouth. Do NOT induce vomiting

P312 Call a POISON CENTER or doctor/physician if you feel unwell
 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 eye protection

P201 Obtain special instructions before use

P308 + P313 IF exposed or concerned: Get medical advice/attention

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P310 Immediately call a POISON CENTER or doctor/ Physician

P273 Avoid release to environment

3.0 Composition/ Information on ingredients

EC No	Component	GHSCLAS	Classification
EEC No. 233-110-4	HYDRAZINE SULFATE 10034-93-2	Acute Tox. 3 (H311) Skin Sens.1 (H317) Carc. 1B (H350) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	Carc. Cat. 1; R45 T:R23/24/25 R43 N: R50/53

Weight %	CAS No
>95	10034-93-2

4.0 First Aid measures**4.1 Description of first aid measures****General Advice****If Inhaled:**

Remove from exposure. If breathing stops or show sign of failing, give artificial respiration. Obtain medical attention urgently. Keep warm and at rest. If there is difficulty in breathing, give oxygen. Do not use mouth to mouth ventilation.

In Case of Skin contact:

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty

In case of eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible

If Swallowed:

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately.

5.0 FIRE FIGHTING MEASURES**5.1 Extinguishing media****Suitable extinguishing Media:**

Use water Spray, Alcohol-resistant foam, Dry Chemical or carbon dioxide

5.2 Special hazards arising from the substance or mixture**Specific hazards during fire fighting:**

Highly flammable. Vapours may form explosive mixtures in air-take precautionary measures against static discharges. The vapour is heavier than air and may travel a considerable distance to a source of ignition and will flash back. Combustion will evolve toxic vapours. Heating of the sealed container may cause a pressure rise with a risk of explosion.

5.3 Advice for fire-fighters

Special protective equipment for fire-fighters:	In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)
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6.0 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions:	Ventilate the area to dispel possible toxic decomposition fumes. Wear appropriate protective clothing. Use personal protective equipment. Keep away unprotected persons. Danger of slipping if spilled. Avoid contact with skin and eyes. Do not breathe vapours or spray mist.
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6.2 Environmental precautions:

Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases

6.3 Methods and materials for containment and cleaning up:

Absorb with liquid-binding material, Keep in suitable, closed containers for disposal.

Further Information:

Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetaion.

7.0 Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:

Keep containers tightly closed. Use personal Protective equipment. Provide sufficient air exchange and/ or exhaust in work rooms. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Avoid contact with the skin and the eyes. Avoid inhalation of vapour or mist. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures:

Keep away from sources or ignition, no smoking, take precautionary measures against static discharge. Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage area containers:

Storage area should be: well ventilated Stock tanks should be bunded and consideration should be given to vent system with a water scrubber to dispel fumes. Tanks should be equipped with airflow pipes directed into the base of the bund with a frost-protected seal to contain fumes.

Advice on Protection Against fire and explosion:

Keep container tightly closed and in well ventilated area. Keep away from heat and direct sunlight. Store this product in a secure area to prevent unauthorised use. Avoid contact with Rubber and various plastics

Further information on storage conditions:

Keep tightly closed in a dry and cool place. Keep in well ventilated place.

Advice on common storage:

Keep away from food, drink and animal feeding stuffs.

8.0 Exposure controls/ personal protection

Control Parameters

Exposure Limits

This product, as supplied, does not contain any hazardous material with occupational exposure limits established by the region specific bodies

Derived No Effect Level (DNEL)

No Data

Predicted No Effect Concentration (PNEC)

No Data

Exposure Controls

Engineering Measures Use only under a chemical fume hood Ensure that eyewash stations and safety showers are close to workstation location

Personal Protective Equipment

Eye Protection Safety glasses with Side-shields
Hand Protection Protective Gloves
Skin and body protection Wear appropriate gloves and clothing to prevent skin exposure
Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

Environmental Exposure Controls No Data

General advice Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities for such cases

9.0 Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form	Solid
Colour	White
Odour	Odorless
PH	1.5 5% aq.sol.
Vapor Pressure	No Data
Vapor Density	No Data
Freezing Point	No Data
Boiling Point	No Data
Melting Point	254C / 489.2F
Flash Point	No Data
Decomposition Temperature	>254C
Water solubility	30 g/l (20C)
Molecular Formula	H4 N2 . H2 S O4
Molecular Weight	130.12

10.0 Stability and reactivity This product is stable

Reactivity

Chemical Stability Stable under normal conditions

Possibility of Hazardous Reactions

Hazardous Polymerization Hazardous Polymerization does not occur

Hazardous Reactions None under normal processing

Conditions to Avoid Incompatible products, Excess heat, avoid dust formation

Incompatible Materials Strong Oxidizing Agents

Hazardous Decomposition Products Carbon Monoxide
Carbon Dioxide
Nitrogen Oxides
Sulfur Oxides

11.0 Toxicological Information**11.1 Information on toxicological effects**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrazine Sulfate	601 mg/kg (Rat)		

Inhalation

Carcinogenicity The European Union classifies this product as a carcinogen

Sensitization No Data

Mutagenic Effects Mutagenic effects have occurred in experimental animals

Reproductive Effects No Data

Developmental Effects No Data

Target Organs Respiratory System Liver

Other Adverse Effects See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated

Endocrine Disruptor Information No Data

12.0 Ecological Information

Persistence and Degradability No data

Bioaccumulative potential No data

Mobility in Soil No data

Results of PBT and vPvB assessment
Other adverse effects

No data
No data

13.0 Disposal considerations

13.1 Waste treatment methods

Product

Disposal together with normal waste is not allowed. Special disposal required to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated Packaging

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

European Waste Catalogue Number

No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

14.0 Transport information

14.1 UN number

3288

14.2

Hazard Class
Subsidiary Hazard Class
Packing Group
Proper Shipping Name

6.1
NA
III
Toxic solid, inorganic, n.o.s

14.3 Transport hazard class(es)

ADR-Class
Subsidiary Hazard Class
(labels; Classification Code; Hazard Identification No; Tunnel restriction code)
Proper Shipping Name

6.1
3288
NA
III
Toxic solid, inorganic, n.o.s

IATA

UN Number
Hazard Class
Subsidiary Hazard Class
Packing Group
Proper Shipping Name

3288
6.1
NA
III
Toxic solid, inorganic, n.o.s

15.0 Regulatory Information

Component
IMIDAZOLE EXTRA PURE

EINECS	233-110-4
ELINCS	-
NLP	-
TSCA	X
DSL	X
NDSL	-
PICCS	X
ENCS	X
CHINA	X
AICS	X
KECL	KE-19990 X

TSCA	United States Toxic Substance Control Act 8 (b) Inventory
EINECS/ELINCS	European Inventory Lists
DSL/NDSL	Canadian Domestic Substances list/ Non-Domestic Substance list
PICCS	Philippines Inventory of chemicals and chemical substances
ENCS	Japan Existing and New chemical substances
CHINA	China Inventory of existing chemical substances
AICS	Inventory of chemical substances
KECL	Existing and evaluated chemical substances

16.0 Other information

Full text of R-Phrases referred to under section 2 and 3

R45 MAY CAUSE CANCER
R43 MAY CAUSE SENSITIZATION BY SKIN CONTACT

R23/24/25	TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED
R50/53	VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT

Full text of H-Statements referred to under section 2 and 3

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Full text of Safety Phrases

S7	Keep container tightly closed
S16	Keep away from sources of ignition- No smoking
S24/25	Avoid contact with skin and eyes
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37	Wear suitable protective clothing and gloves
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

Other information

This information is based upon Solumetrics Ltd Knowledge of this product at the time this Safety Data Sheet was prepared. It is given in good faith and no warranty is implied. The information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The user must satisfy him/her self as to the purpose this product is put to and the possible change in classification should this product be mixed or formulated with other compounds