



SAFETY DATA SHEET

SODIUM SULPHATE ANHYDROUS

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. PRODUCT IDENTIFIER

Product name: Sodium Sulphate Anhydrous
Product No.: SOSU
CAS-No.: 7757-82-6
EC No.: 231-820-9
REACH No.: 01-2119519226-43
Synonym: Sulphuric acid, Sodium salt, Natriumsulfat, Sodium sulfate, Sulfate of sodium, Sulfate of soda
Chemical Formula: Na_2SO_4

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Recommended use: In the laboratory as an inert drying agent, for removing traces of water from organic solutions;
In many powdered cleaners including laundry powders, destaining powders, carpet cleaners etc;
In the electrochemical metal treatment, semi-conductors, intermediates, and agriculture;
In the food industry as a diluent for food colours;
In the manufacture of textiles.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

HD Chemicals LTD
UNIT 9 Scott Business Park
PL2 2PB Plymouth UK

Contact Person responsible for SDS: Mr Peter Konefal, e-mail: contact@hdchemicals.co.uk

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification 67/548/EEC: Not Classified



Classification – EC 1272/2008: Not Classified

2.2. LABEL ELEMENTS

No labelling requirements

SIGNAL WORDS

Not Classified

RISK PHRASES

Not Classified

HAZARD PHRASES

Not Classified

PROTECTION PHRASES

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

SAFETY PHRASES

Not Classified

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

67/548/EEC/1999/45/EC

Composition information – main constituents

Substance name	Mol. Formula	REACH	EINECS No.	CAS-No.	Classification
Sodium Sulphate Anhydrous	Na ₂ SO ₄	01-2119519226-43	231-820-9	7757-82-6	Not Classified



EC 1272/2008

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SECTION 4: FIRST AID MEASURES**4.1. DESCRIPTION OF FIRST AID MEASURES**

First-aid measures general: Consult a physician when you feel unwell. Show this safety data sheet to the doctor in attendance.

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

Ingestion: Wash out mouth with water. Have victim drink 240-300ml of water to dilute stomach contents. Obtain medical attention. Do not induce vomiting.

Skin contact: Remove contaminated clothing. Immediately flood the skin with large quantities of water, preferably under a shower. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention if blistering occurs or redness persists.

Eye contact: Immediately flood the eyes with plenty of water for at least 10 minutes, holding the eyes open. Get medical attention if irritation occurs.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Inhalation: May irritate the respiratory system and cause coughing.

Ingestion: May cause discomfort if swallowed. Nausea, vomiting.

Skin contact: May produce irritation in people with sensitive skin.

Eye contact: May cause temporary eye irritation.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically.



SECTION 5: FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO₂), dry powder or polar resistant foam.

Unsuitable extinguishing media: Do not use water jet as this can spread the fire.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Product is non-flammable, but thermal decomposition can lead to release of irritating and toxic gases and vapours. Hazardous combustion products carbon monoxide (CO), carbon dioxide (CO₂), sulphur dioxide (SO₂), oxides of sulphur (SO).

5.3. ADVICE FOR FIRE-FIGHTERS

Wear full protective clothing must be worn in case of fire and self-contained positive pressure breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Wear suitable protective equipment (splash goggles, protective suit, boots, gloves and self-contained breathing apparatus) to prevent any contamination of skin, eyes and personal clothing. Ensure adequate ventilation of the working area. Avoid contact with skin and eyes. Avoid breathing vapours, mist or gas. Avoid formation of dust. Keep unprotected persons away. Evacuate personnel to a safe area.

For personal protection see section 8.1.

6.2. ENVIRONMENTAL PRECAUTIONS

Avoid release to the environment. Do not allow to enter sewers/ surface or ground water. Do not allow to enter into soil/subsoil. Prevent further leakage or spillage if safe to do so. Use appropriate container to avoid environmental contamination. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Drench spillage with water and wash to drain, diluting greatly with water. Sweep or preferably vacuum up and collect in suitable containers for recovery or disposal. Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

**SECTION 7: HANDLING AND STORAGE****7.1. PRECAUTIONS FOR SAFE HANDLING**

Handle in accordance with good industrial hygiene and safety practice. Avoid formation of dust. Do not inhale dust/smoke/mist. Ensure adequate ventilation of the working area. Wear personal protective equipment. Avoid contact with eyes and skin. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products. Avoid the formation or spread of mists in the air. Keep container tightly closed when not in use.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep in a cool, dry, well ventilated area. Keep in original tightly closed containers. Store away from heat, direct sunlight and moisture. Avoid freezing conditions.

7.3. SPECIFIC END USE(S)

See section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. CONTROL PARAMETERS/EXPOSURE GUIDELINES**

Occupational Exposure Limit Values (Sodium Sulphate Anhydrous):

CAS NO	Exposure limit	Value	Name of Agent
7757-82-6	TWA – 8 Hrs	10 mg/m ³	Inhalable dust
7757-82-6	STEL – 15 Min	N/A	N/A

Engineering controls:

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands before breaks and at the end of the working day. Store away from heat, direct sunlight and moisture. Avoid freezing conditions.



EYE PROTECTION



FACE SHIELD



RESPIRATOR



PROTECTION WEAR



HAND PROTECTION

- Protective equipment:** Use protective tightly fitting safety goggle (European standard - EN 166), gloves (European standard - EN 374) and long sleeved clothing to prevent skin, body and eyes exposure.
- Respiratory equipment:** Wear suitable dust respirator if dusts are generated and there is insufficient ventilation or extraction. Particulate filter type P2. Respiratory protection should conform to the following standards. BS EN 143: Particulates.
- Skin and body protection:** Wear appropriate protective gloves and clothing to prevent skin exposure. The glove material has to be impermeable and resistant to the product. Protective gloves should be replaced at first signs of wear. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Protective gloves made of rubber are recommended. Chloroprene rubber, CR. Nitrile rubber, NBR. Personal protective equipment for the body should be selected based on the task being performed and the risks involved (overalls or lab coat).
- Eye/Face protection:** Wear appropriate tightly fitting protective eye glasses or chemical splash goggles as described by EN166 (EU Standard). Ensure eye bath is to hand.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Granular solid
Colour:	White
Odour:	Odourless
Initial boiling point (°C):	No data available



Melting point (°C):	884°C
Freezing point:	No data available
Relative density:	2.664 g/cm ³
Specific gravity / density:	Not available
Vapour density:	Not available
Vapour pressure:	Not available
Flash point (°C):	Not available
Molecular mass:	142.04 g/mol
Auto-ignition temperature:	Not applicable
Oxidizing properties:	Not available
Decomposition temperature:	Not available
Molecular formula:	Na ₂ SO ₄

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

Sodium Sulphate Anhydrous is non-reactive under normal conditions of use, storage and transport.

10.2. CHEMICAL STABILITY

This product is stable under room temperature, normal conditions and under recommended usage and storage.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

When heated can decompose. May liberate toxic gases. See section 10.5.

10.4. CONDITIONS TO AVOID

Store away from heat, direct sunlight and moisture. Avoid freezing conditions.

10.5. INCOMPATIBLE MATERIALS

May liberate toxic gases. Materials to avoid: strong oxidising substances, strong acids, aluminium, magnesium.



10.6. HAZARDOUS DECOMPOSITION

Product is non-flammable, but thermal decomposition can lead to release of irritating and toxic gases and vapours. Hazardous combustion products carbon monoxide (CO), carbon dioxide (CO₂), sulphur dioxide (SO₂), oxides of sulphur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

TOXIC DOSE **LD50 Oral – Mouse – 5989 mg/kg**
LD50 Oral – Rat – > 2000 mg/kg

Inhalation: May irritate the respiratory system and cause coughing.

Ingestion: May cause discomfort if swallowed. Nausea, vomiting.

Skin contact: May produce irritation in people with sensitive skin.

Eye contact: May cause temporary eye irritation.

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Aquatic Toxicity:

Toxicity to freshwater fish: LC50: 7690 mg/l, 96h (Pimephales promelas)

Toxicity to water flea: EC50: 4580 mg/l, 48h (Daphina magna)

12.2. PERSISTENCE AND DEGRADABILITY

Does not biodegrade, inorganic substance.

12.3. BIOACCUMULATIVE POTENTIAL

No bioaccumulation potential.

log Pow - 4.38

12.4. MOBILITY

Sodium sulphate will be ionised in water and adsorbed at different rates dependent upon pH.



12.5. RESULTS OF PBT AND vPvB ASSESSMENT

This product is not identified as a PBT/vPvB substance.

12.6. OTHER ADVERSE EFFECTS

No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal recommendations: Disposal of sodium sulphate anhydrous should be in accordance with local and national legislation. Processing, use or contamination of this product may change the waste management options. The product is not classified as hazardous waste. Should not be released into the environment. Dispose of container and unused contents in accordance with applicable member state and local requirements.

Uncleaned packaging: Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

IMDG

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

ADR/RID

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

IATA

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

**SECTION 15: REGULATORY INFORMATION****15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE**

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2 CHEMICAL SAFETY ASSESSMENT

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: OTHER INFORMATION**General information**

The information contained in this safety data sheet is provided in accordance with the requirements of the regulations. The product should not be used for purposes other than those shown in section 1 without first referring to the supplier and obtaining written handling instruction. As the specific conditions of use of the product are outside the suppliers control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

Revision Comments

This information is provided in a revised format to that previously produced.

Revision Date: 01/10/2018

Revision: 01

Safety Data Sheet Status Approved.

Date printed 01/10/2018

Signature Initials P.K.

DISCLAIMER:

If this product is re-distributed and re-formulated for sale, details of its hazards and recommended methods for safe handling must be passed to customers. Customers are urged to ensure that the product is entirely suitable for their own purpose. It is the customer's responsibility to ensure that a suitable and sufficient assessment of the risks created by a work activity using this product is undertaken before this product is used.



NOTE:

The information contained in this Safety Data Sheet does not constitute the users own assessment of workplace risk as required by other Health & Safety Legislation (e.g. the Health and Safety at Work Act,1974;the control of Substances Hazardous to Health Regulations,1988). The data given here is based on current knowledge and experience. The purpose of this data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.