



# SAFETY DATA SHEET

## 92.0%

### SODIUM BISULPHATE

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

##### 1.1. PRODUCT IDENTIFIER

Product name: Sodium Bisulphate  
Product No.: SOBI  
CAS-No.: 7681-38-1  
EC No.: 231-665-7  
REACH No.: 01-2119552465-36  
Synonym: Sodium hydrogen sulphate, Sodium bisulphate, Sodium bisulphate, Sodium acid sulphate, Sodium acid sulphate, Bisulfate of soda, Dry acid, pH Decreaser  
Chemical Formula:  $\text{NaHSO}_4$

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

Recommended use: In the household cleaners;  
As acid cleaner for industry, breweries, dairies etc;  
As a preservative for soil and water samples in analytical laboratory analysis;  
Used for the dehydration of castor oil;  
An auxiliary agent for the bleaching and dyeing of wool;  
A polishing and grinding agent for glass;  
Used in the leather industry;  
As a flux for metal pickling;  
In the mineral oil industry for the extraction of nitrogen compounds from hydrocarbons (gas scrubbing);  
To reduce alkalinity and pH in swimming pools;  
As a silage additive;  
When mixed with potassium dichromate it is used as a bleach in photography.

### 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](mailto:contact@hdchemicals.co.uk)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification 67/548/EEC: Xi; R41

Classification – EC 1272/2008: Serious Eye Damage; Category 1 (H318)

### 2.2. LABEL ELEMENTS



#### SIGNAL WORDS

Danger

#### RISK PHRASES

R41 Risk of serious damage to eyes

#### HAZARD PHRASES

H318 Causes serious eye damage

#### PROTECTION PHRASES

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**SAFETY PHRASES**

- S24 Avoid contact with skin
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

67/548/EEC/1999/45/EC

**Composition information – main constituents**

Substance name	Mol. Formula	REACH	Typical conc. (%w/w)	EINECS No.	CAS-No.	Classification
Sodium Bisulphate	NaHSO <sub>4</sub>	01-2119552465-36	92.0%	231-665-7	7681-38-1	Xi; R41

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 the person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

**Ingestion:** DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Provide rest, warmth and fresh air. Rinse mouth and drink plenty of water (200-300ml). Seek medical attention if any discomfort continues.



**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash off immediately with plenty of soap and water for at least 15 minutes. Seek medical attention if irritation or symptoms persist.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. Continue to rinse.

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

**Inhalation:** Irritating to respiratory system

**Ingestion:** May cause discomfort if swallowed. May cause stomach pain or vomiting.

**Skin contact:** Prolonged skin contact may cause redness and irritation

**Eye contact:** Causes serious eye damage

#### **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. Use water fog, carbon dioxide (CO<sub>2</sub>), dry powder, alcohol-resistant foam.

Unsuitable extinguishing media: High volume water jet.

#### **5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE**

Thermal decomposition can lead to release of irritating gases and vapours of sulphur oxides. The substance can be released if the product is involved in a fire.

#### **5.3. ADVICE FOR FIRE-FIGHTERS**

Fight fire with normal precautions from a reasonable distance. Wear suitable respiratory equipment when necessary. Wear protective clothing to prevent contact with skin and eyes.



## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Wear suitable protective equipment. Splash goggles, protective suit, boots and gloves 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.

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. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

### 6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Shovel into dry containers. Cover and move the containers. Flush the area with water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Avoid dust formation. Ensure adequate ventilation.

## 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. Keep away from sources of ignition - no smoking.

For precautions see section 2.2.

### 7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep in a cool, dry, well ventilated area. Keep in original tightly closed containers. Keep away from direct sunlight and heat. Avoid moisture. Keep away from food, drink and animal feeding stuff.

### 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 Bisulphate):

CAS NO	Exposure limit	Value	Name of Agent
7681-38-1	TWA – 8 Hrs	N/A	N/A
7681-38-1	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. Keep away from foodstuffs, beverages and feed.



EYE PROTECTION



FACE SHIELD



RESPIRATOR



PROTECTION WEAR



HAND PROTECTION

**Protective equipment:**

Use protective goggles (European standard - EN 166), gloves (European standard - EN 374) and long sleeved clothing to prevent skin, body and eyes exposure.

**Respiratory equipment:**

Respiratory protection not required but when If ventilation is insufficient, suitable respiratory protection must be provided. Use respirator with an approved filter P1.



- 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. The following materials are suitable: PVC gloves or rubber gloves.
- Eye/Face protection:** Wear appropriate tightly fitting protective eye glasses or chemical safety 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:	Powder
Colour:	White
Odour:	Odourless
Initial boiling point (°C):	No data available
Melting point (°C):	315°C
Freezing point:	No data available
Relative density:	2.742 g/cm <sup>3</sup>
Specific gravity / density:	Not available
Vapour density:	Not available
Vapour pressure:	Not available
Flash point (°C):	Not available
Molecular mass:	120.06 g/mol
Auto-ignition temperature:	Not applicable
Oxidizing properties:	Not available
Decomposition temperature:	Not available
Molecular formula:	NaHSO <sub>4</sub>

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. REACTIVITY

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



## 10.2. CHEMICAL STABILITY

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

## 10.3. POSSIBILITY OF HAZARDOUS REACTIONS

May liberate toxic gases. Thermal decomposition generates: sulphur oxides.

## 10.4. CONDITIONS TO AVOID

Keep away from direct sunlight and heat. Avoid moisture and water. Keep away from food, drink and animal feeding stuff.

## 10.5. INCOMPATIBLE MATERIALS

Incompatible with strong bases, hypochlorite, oxidizing agents, bleaching agent, chlorates nitrates. Water-reactive materials.

## 10.6. HAZARDOUS DECOMPOSITION

Thermal decomposition can lead to release of irritating gases and vapours of sulphur oxides. The substance can be released if the product is involved in a fire.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

<b>TOXIC DOSE</b>	<b>LD50 Oral – Rat – 2800 mg/kg</b>
<b>Inhalation:</b>	Irritating to respiratory system
<b>Ingestion:</b>	May cause discomfort if swallowed. May cause stomach pain or vomiting
<b>Skin contact:</b>	Prolonged skin contact may cause redness and irritation
<b>Eye contact:</b>	Causes serious eye damage

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. TOXICITY

#### Aquatic Toxicity:

Toxicity to freshwater fish: LC50: 7960 mg/l, 96h





Toxicity to water flea: EC50: 1766 mg/l, 48h (Daphnia magna)

Toxicity to algae: EC50: 1900 mg/l, 72h

### 12.2. PERSISTENCE AND DEGRADABILITY

No data available.

### 12.3. BIOACCUMULATIVE POTENTIAL

Bioaccumulation is unlikely.

### 12.4. MOBILITY

The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.

### 12.5. RESULTS OF PBT AND vPvB ASSESSMENT

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

### 12.6. OTHER ADVERSE EFFECTS

Product is acidic, and will reduce the pH of water courses and drains, and cause damage to flora and fauna.

## SECTION 13: DISPOSAL CONSIDERATIONS

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

**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**

For this product a chemical safety assessment was not carried out.

**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.