



# Material Safety Data Sheet

## Sodium Sulphate

Edition: 04/12/2014

In compliance with Regulation (EC) 1907/2006, And  
Annex II/ Regulation (EC) 453/2010

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### 1) Identification of substance/preparation and of the company undertaking

Material	Sodium Sulphate
Synonyms:	Anhydrous sodium sulphate, salt cake
Product form:	Substance
EC No	231-820-9
CAS No	7757-82-6
REACH Registration No	Exempted in accordance with Annex V.7
Company	Inoxia Ltd 45.7 Dunsfold Park Stovolds Hill Cranleigh Surrey GU6 8TB Tel: 02032 909990 safety@inoxia.co.uk www.inoxia.co.uk

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

#### 1.2.1. Relevant identified uses

Use of the substance/preparation:

Substance used as such, in formulation or in formulation of products such as:

- Paper
- Metal Treatment
- Glass
- Textiles
- Agriculture
- Detergents

#### 1.2.2. Uses advised against

None identified.

Full text of use descriptors: see section 16.

### 2) Hazards identification.

#### 2.1. Classification of the substance or mixture

**Product definition:** Substance

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Physical and chemical hazards: Not classified

Human health: Not classified

Environment: Not classified

Full text of H-phrases: see section 16

### **Classification according to Directive 67/548/EEC [DSD]**

Not classified

Full text of R-phrases: see section 16

### **2.2. Label elements**

#### **Labelling according to Regulation (EC) No. 1272/2008 (CLP)**

None

### **2.3. Other hazards**

Product forms slippery surface when combined with water.

## **3) Composition/information on ingredient**

### **3.1. Substances**

Name: Sodium Sulphate

CAS No. : 7757-82-6

EC no : 231-820-9

#: 100

Classification (67/548/EEC): N/A

Classification (1272/2008/EC): N/A

Full text of R-, H- and EUH-phrases: see section 16

REACH registration No.: Exempted in accordance with Annex V.7

## **4) First Aid Measures**

### **4.1. Description of first aid measures**

**First-aid measures after inhalation:** May cause irritation to mucous membranes. Move the exposed person to fresh air at once

**First-aid measures after skin contact:** May cause irritation to the skin. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Get medical attention if irritation persists after washing

**First-aid measures after eye contact:** May cause irritation to the eyes. Make sure to remove any contact lenses from the eyes before rinsing. Rinse eyes with water immediately for 15 minutes holding the eyelids open. Get medical attention if any discomfort continues.

**First-aid measures after ingestion:** May cause irritation to mucous membranes. Drink plenty of water. Seek medical attention. Large doses have a laxative effect.

### **4.2. Most important symptoms and effects, both acute and delayed**

Inhalation: No significant effects or critical hazards.

Ingestion: No significant effects or critical hazards.

Skin contact: No significant effects or critical hazards.

Eye contact: No significant effects or critical hazards.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

#### **5) Fire Fighting**

##### **5.1. Extinguishing media**

**Suitable extinguishing media:** No limitations. Adjust extinguishing media to the surrounding fire

**Unsuitable extinguishing media:** None.

##### **5.2. Special hazards arising from the substance or mixture**

**Fire hazard:** Not flammable.

**Explosion hazard:** No explosive properties known.

**Reactivity:** Toxic and irritant gases may be formed in fire conditions

##### **5.3. Advice for firefighters**

Protection during firefighting: Fire fighter should wear the usual protective clothing and self-contained breathing apparatus.

#### **6) Accidental Release**

##### **6.1. Personal precautions, protective equipment and emergency procedures**

General measures: Keep public away from danger area. See section 8.2.

###### **6.1.1. For non-emergency personnel**

No additional information available

###### **6.1.2. For emergency responders**

No additional information available

##### **6.2. Environmental precautions**

Prevent entry to sewers and soil. Notify authorities if product enters sewers or public waters.

##### **6.3. Methods and material for containment and cleaning up**

Methods for cleaning up: Sweep or shovel spills into appropriate container for disposal. Avoid dust production.

##### **6.4. Reference to other sections**

See section 8 and 13 for more information.

#### **7) Handling/Storage**

##### **7.1. Precautions for safe handling**

**Precautions for safe handling:** Do not breathe dust. Wash hands plentifully and other exposed areas with water after handling. Remove contaminated clothing and shoes. Wash clothing before re-using

**Packagings:** Even those that have been emptied, will retain product residue. Always obey safety warnings and handle empty packages as if they were full. Avoid all contact with this substance.

**Hygiene measures:** When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Remove contaminated clothing and shoes.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in dry, cool, well-ventilated area. Keep away from food, drink and animal feeding stuffs.

### 7.3. Specific end use(s)

The identified uses for this product are detailed in section 1.2

## 8) Exposure Controls/Personal Protection

### 8.1. Control parameters

Occupational exposure limits: No exposure limit value known

### 8.2. Exposure controls

**Appropriate engineering controls:** Use as far as possible in a closed system. Provide a regular control of the atmosphere. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Local exhaust and general ventilation must be adequate to meet exposure standards. Please refer to the annex (exposure scenarios).

**Hand protection:** Use gloves resistant to chemical products corresponding to EN 374:3. Take advice to gloves' manufacturer

**Eye protection:** Wear safety glasses with side shields according EN 166.

**Skin and body protection:** Wear closed protective clothing.

**Respiratory protection:** Use respiratory protection mask according to EN 140 or EN 405 with filter type P3 according to EN 143:2000 or FFP3 according to EN 149:2001.

**Environmental exposure controls:** Avoid release to the environment.

Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust).

## 9) Physical/Chemical Properties

Physical state	Granular Solid
Colour	White
Odour	Odourless
Odour threshold	Not determined
pH-	5.5 – 8.0
Relative evaporation rate (butylacetate=1)	No data available

Melting point	884 <sup>0</sup> C
Boiling point	No data available
Initial boiling point	Not applicable
Flash point	Not flammable
Self ignition temperature	Not applicable
Decomposition temperature	1,200 <sup>0</sup> C
Flammability (solid, gas)	Not flammable
Vapour pressure	Not applicable
Relative vapour density at 20 °C	Not applicable
Relative density at 20 °C	2.7 g/cm <sup>3</sup> (at 20 <sup>0</sup> C)
Density	No data available
Log Pow	Not applicable
Log Kow	Not applicable
Viscosity, kinematic	Not applicable
Viscosity, dynamic	Not applicable
Explosive properties	Not explosive.
Oxidising properties	None
Explosive limits	Not applicable
Water solubility	186 g/l
Partition Coefficient	-4.38
Solubility	Soluble in water

## 9.2. Other information

Chemical formula: Na<sub>2</sub>SO<sub>4</sub>

Molecular weight: 142.04

## 10) Stability/Reactivity

### 10.1. Reactivity

No specific test data related to reactivity available for this product or its ingredients.

### 10.2. Chemical stability

The product is stable.

### 10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4. Conditions to avoid

Avoid contact with Humidity to avoid caking.

### 10.5. Incompatible materials

None known

### 10.6. Hazardous decomposition products

When heated to decomposition, toxic gases might be formed (Sulphur Oxide)

## 11) Toxicological Info

### 11.1. Information on toxicological effects

Acute toxicity	No known adverse health effects
Skin corrosion/irritation	No known adverse health effects
Serious eye damage/irritation	May cause irritation to the eyes
Respiratory or skin sensitisation	No known adverse health effects
Germ cell mutagenicity	No mutagenic effects reported
Carcinogenicity	No carcinogenic effects reported
Reproductive toxicity	No reproductive toxic effects
Teratogenicity	No tetragenic effects reported
Potential acute health effects reported	No known significant effects or critical hazards

Conclusion/Summary: No known significant effects or critical hazards.

## 12) Ecological Information

### 12.1. Toxicity

#### Sodium Sulphate:

Daphnia EC50/48 h: 4,580 mg/l

Daphnia magna (Mount 1997) EC50 24h: 6,290 mg/l

### 12.2. Persistence and degradability

Remains unchanged in aerobic aquatic medias,. In anoxic conditions can be reduced by anaerobic bacteria to sulphur ion.

### 12.3. Bioaccumulative potential

Does not bioaccumulate.

### 12.4. Mobility in soil

Dissolved in water penetrates into ground easily.

### 12.5. Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT or vPvB criteria of REACH, annex XIII.

### 12.6. Other adverse effects

None known

## 13) Disposal Considerations

### 13.1. Waste treatment methods

**Waste treatment methods:** Dispose of this material and residues in accordance with local authority requirements.

**Additional information:** Empty packaging can have residues or dusts and are subject to proper waste disposal, as above.

**Ecology - waste materials:** See the European waste catalogue. Waste code 06 03 14

## **14) Transport Information**

### **14.1 UN Number**

The product is not covered by international regulation on transport of dangerous goods (IMDG, IATA, ADR/RID).

### **14.2 UN Proper Shipping Name**

Not classified for transportation.

### **14.3 Transport Hazard Class(es)**

Not classified for transportation.

### **14.4. Packing group**

Not classified for transportation.

### **14.5. Environmental hazards**

Other information: No environmental hazards known with this product

### **14.6. Special precautions for user**

Not classified for transportation

### **14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

## **15) Regulatory Information**

### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Regulations COMMISSION REGULATION (EU) No 453/2010** of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

**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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

## 16) Other Information

### Abbreviations and acronyms:

ADN: European Agreement concerning international carriage of Dangerous goods by Inland waterways

ADR: European Agreement concerning international carriage of Dangerous goods by Road

AF: Assessment factor

ATE: Acute Toxicity Estimate

BCF: Bioconcentration factor

Bw: Body weight

CAS: Chemical Abstracts Service

CLP: Classification, labelling, packaging

CSR: Chemical Safety Report

DMEL: Derived maximum effect level

DNEL: Derivative No effect Level

EC: European Community

ELV: Emission limit values

EN: European Norm

EUH: European Hazard Statement

EWC: European Waste catalogue

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods

LC50: Median lethal concentration

LD50: Median lethal dose

NOAEL: No-observed-adverse-effect-level

NOEC: No observed effect concentration

NOEL: No observed effect level

OEL: Operator exposure level

PBT: Persistent, bioaccumulative, Toxic

PEC: Predicted effect level

PNEC: Predicted No effect Concentration

REACH: Registration, evaluation and authorisation of chemicals

RID: Regulations concerning the international carriage of dangerous goods by rail

STEL: Short Term Exposure Limit

TWA: Time weighted average

vPvB: Very persistent, very bioaccumulative.

This document differs from the previous version in the following areas:

9 - 9.1. Information on basic physical and chemical properties (Colour).

9 - 9.1. Information on basic physical and chemical properties (PH).

9 - 9.1. Information on basic physical and chemical properties (Explosive).

16 - Further information.

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

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