

## MATERIAL SAFETY DATA SHEET BORAX GRANULAR

### 1: Chemical Product

Product Name: Sodium Borate (Borax, fused)  
Catalogue Codes: SLS1144  
CAS#: 1330-43-4  
RTECS: ED4588000  
TSCA: TSCA 8(b) inventory: Sodium Borate (Borax, fused)  
CI#: Not available.  
Synonym: Sodium Biborate; Fused Borax; Sodium Boron oxide; Sodium Tetraborate; Anhydrous Borax  
Chemical Name: Boric Acid Disodium Salt  
Chemical Formula: B4-O7.2Na or Na2-B4-O7

### 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Sodium Borate (Borax, fused)	1330-43-4	100

Toxicological Data on Ingredients: Not applicable

### 3: Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

### 4: First Aid Measures

#### Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

#### Skin Contact:

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact: Not available.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

#### Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

### 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points:	Not applicable.
Flammable Limits:	Not applicable.
Products of Combustion:	Not available.
Fire Hazards in Presence of Various Substances:	Not applicable.
Explosion Hazards in Presence of Various Substances:	
Risks of explosion of the product in presence of mechanical impact:	Not available.
Risks of explosion of the product in presence of static discharge:	Not available.
Fire Fighting Media and Instructions:	Not applicable.
Special Remarks on Fire Hazards:	Not available.
Special Remarks on Explosion Hazards:	Not available.

## 6: Accidental Release Measures

### Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

### Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## 7: Handling and Storage

Precautions: No specific safety phrase has been found applicable for this product.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

## 8: Exposure Controls/Personal Protection

### Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

### Exposure Limits:

Consult local authorities for acceptable exposure limits.

## 9: Physical and Chemical Properties

Physical state and appearance:	Solid.
odour:	Odourless.
Taste:	Not available.
Molecular Weight:	201.22 g/mole
Colour:	White.
pH (1% soln/water):	Not available.
Boiling Point:	Not available.
Melting Point:	741°C (1365.8°F)
Critical Temperature:	Not available.
Specific Gravity:	2.367 (Water = 1)

Vapor Pressure: Not applicable.  
Vapor Density: Not available.  
Volatility: Not available.  
odour Threshold: Not available.  
Water/Oil Dist. Coeff.: Not available.  
Ionicity (in Water): Not available.  
Dispersion Properties: See solubility in water.  
Solubility:  
Partially soluble in cold water, hot water. Solubility in water: 1.06 g/100 ml water @ 0 deg. C  
Solubility in water: 8.79 g/100 ml water at 40 deg. C Solubility in water: 2.56 g/100 ml water @ 20 deg. C. Insoluble in alcohol

### 10: Stability and Reactivity Data

Stability: The product is stable.  
Instability Temperature: Not available.  
Conditions of Instability: Incompatible materials, moisture  
Incompatibility with various substances: Reactive with reducing agents.  
Corrosivity: Non-corrosive in presence of glass.  
Special Remarks on Reactivity:  
Hygroscopic; keep container tightly closed. Incompatible with alkaloidal salts, mercuric chloride, zinc sulfate, and other metallic salts. Incompatible with moisture. Forms partial hydrate in moist air.  
Special Remarks on Corrosivity: Not available.  
Polymerization: Will not occur.

### 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.  
Toxicity to Animals:  
Acute oral toxicity (LD50): 2400 mg/kg [Rat]. Acute dermal toxicity (LD50): >2000 mg/kg [Rabbit].  
Chronic Effects on Humans: Not available.  
Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.  
Special Remarks on Toxicity to Animals: Not available.  
Special Remarks on Chronic Effects on Humans: May cause adverse reproductive effects.  
Special Remarks on other Toxic Effects on Humans:  
Acute Potential Health Effects: Skin: Dust causes skin irritation. Poorly absorbed through intact skin.  
Eyes: Dust causes eye irritation. Inhalation: Causes respiratory tract irritation. Ingestion: Acute toxic effects of borates in general are nausea, vomiting, diarrhoea, and delayed skin redness, rash, and dizziness. Chronic Potential Health Effects: Chronic exposures can produce eye irritation, coughing, and skin rash (the latter following ingestion).

### 12: Ecological Information

Ecotoxicity: Not available.  
BOD5 and COD: Not available.  
Products of Biodegradation:  
Possibly hazardous short-term degradation products are not likely. However, long term degradation products may arise.  
Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.  
Special Remarks on the Products of Biodegradation: Not available.

### **13: Disposal Considerations**

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### **14: Transport Information**

DOT Classification:	Not a DOT controlled material.
Identification:	Not applicable.
Special Provisions for Transport:	Not applicable.

### **15: Other Regulatory Information**

Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

### **16. Other Information**

References: Not available.

Other Special Considerations: Not available.

### **EXCLUSION OF LIABILITY**

All information and instructions provided in this Material Safety Data Sheet in respect of the substance is given solely in terms of the provisions of the Occupational Health and Safety Act No 85 of 1993

and Regulations ("the Act"), is based on scientific and technical knowledge as at the date indicated on this MS Material Safety Data Sheet and is presented in good faith to be correct.

The information and instructions provided in this MSDS apply only to the substance in its present form and not to any formulation or mix, in which event it is the sole responsibility of the user of the substance as formulated and/or mixed to investigate and establish any danger which may arise out of its use, wherever such user may be situated.

It is the sole responsibility of the person in receipt of this Material Safety Data Sheet wherever such recipient may be situated, to ensure that the information provided is communicated to and understood by any person who may come in contact with the substance in any place and in any manner whatsoever. If such recipient produces formulations or mixes using the substance, then it is such recipient's sole responsibility to comply with the provisions of the Act in respect of the provision of the necessary Material Safety Data Sheet, or to comply with any other applicable legislation.