

## 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

### 1.1 Product Identifier

**Product name:** Sodium Bromate  
**CAS number:** 7789-38-0  
**EINECS number:** 232-160-4

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

**Uses of substance/mixture:** ERC6a: Industrial use resulting in manufacture of another substance (use of intermediates)

### 1.3 Details of the supplier of the safety data sheet

**Company name:** Nexchem Ltd  
Unit 3 Barshaw Park  
Leycroft Road  
Leicester  
LE4 1ET  
Tel: 0116 2311130  
24/7 Emergency Tel: 0800 246 1274  
Email: [sales@nexchem.co.uk](mailto:sales@nexchem.co.uk)

## 2. HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**Classification under CLP:** Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335; Muta. 2: H341; Carc. 1B: H350; Acute Tox. 4: H302; Ox. Sol. 1: H271

**Most important adverse effects:** May cause fire or explosion; strong oxidiser. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Suspected of causing genetic defects. May cause cancer.

### 2.2. Label elements

#### Label elements:

**Hazard statements:** H271: May cause fire or explosion; strong oxidiser.  
H302: Harmful if swallowed.  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H335: May cause respiratory irritation.  
H341: Suspected of causing genetic defects.  
H350: May cause cancer.

**Signal words:** Danger

**Hazard pictograms:** GHS03: Flame over circle  
GHS07: Exclamation mark  
GHS08: Health hazard



**Precautionary statements:**

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P220: Keep/Store away from combustible materials.  
P221: Take any precaution to avoid mixing with combustibles.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/.  
P302+352: IF ON SKIN: Wash with plenty of water/.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P371+380+375: In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

### 2.3. Other hazards

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

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1. Substances

**Chemical identity:** SODIUM BROMATE  
**CAS number:** 7789-38-0  
**EINECS number:** 232-160-4

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin.  
  
Drench the affected skin with running water for 10 minutes or longer if substance is still on skin.

**Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Transfer to hospital as soon as possible.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

**Skin contact:** Irritation or pain may occur at the site of contact. Blistering may occur. Severe burns may occur. Progressive ulceration will occur if treatment is not immediate.

**Eye contact:** There may be irritation and redness. There may be irritation and pain. There may be severe pain. The eyes may water profusely. The vision may become blurred. Corneal burns may occur.

**Ingestion:** There may be irritation of the throat. Nausea and stomach pain may occur. There may be vomiting. There may be soreness and redness of the mouth and throat.

**Inhalation:** There may be a feeling of tightness in the chest with shortness of breath.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

**Immediate / special treatment:** Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. Eye bathing equipment should be available on the premises. A decontamination shower should be available on the premises.

### **5. FIRE-FIGHTING MEASURES**

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

**Extinguishing media:** Water spray. Carbon dioxide. Dry chemical powder.

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

**Exposure hazards:** Oxidising. In combustion emits toxic fumes.

#### **5.3. Advice for fire-fighters**

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

### **6. ACCIDENTAL RELEASE MEASURES**

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

**Personal precautions:** Remove all incompatible materials as outlined in section 10 of SDS. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Eliminate all sources of ignition. Mechanically ventilate the spillage area whilst avoiding the formation of explosive concentrations - see section 9 of SDS. Do not create dust.

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

**Environmental precautions:** Do not discharge into drains or rivers.

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

**Clean-up procedures:** Transfer to a closable, labelled salvage container for disposal by an appropriate method.

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

**Reference to other sections:** Refer to section 8 of SDS. Refer to section 13 of SDS.

### **7. HANDLING AND STORAGE**

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

**Handling requirements:** Ensure there is sufficient ventilation of the area. Ensure there is exhaust ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Smoking is forbidden. Avoid direct contact with the substance.

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

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed. Avoid incompatible materials and conditions - see section 10 of SDS.

**Suitable packaging:** Must only be kept in original packaging.

**Storage quantity limits:** Refer to COMAH

### 7.3. Specific end use(s)

**Specific end use(s):** No data available.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1. Control parameters

**Workplace exposure limits:** No data available.

#### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure all engineering measures mentioned in section 7 of SDS are in place.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter.

**Hand protection:** BS EN 374:2003 Gloves made of thick material. Breakthrough time of the glove material > 2 hours.

**Eye protection:** Tightly fitting safety goggles. Ensure eye bath is to hand.

**Skin protection:** Protective clothing with elasticated cuffs and closed neck.

**Environmental:** Refer to specific Member State legislation for requirements under Community environmental legislation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<b>State:</b>	Powder	<b>Melting point/range°C:</b>	381
<b>Colour:</b>	White	<b>upper: -</b>	
<b>Odour:</b>	Characteristic odour	<b>Part.coeff. n-octanol/water:</b>	No Data
<b>Evaporation rate:</b>	Negligible	<b>Vapour pressure: -</b>	
<b>Oxidising:</b>	Oxidising (by EC criteria)	<b>pH:</b>	> 11 (50 g/L)
<b>Solubility in water:</b>	Highly soluble		
<b>Viscosity:</b>	Non-viscous		
<b>Boiling point/range°C:</b>	1390		
<b>Flammability limits %: lower: -</b>			
<b>Flash point°C: -</b>			
<b>Autoflammability°C: -</b>			
<b>Relative density:</b>	3.339		
<b>VOC g/l:</b>	0		

### 9.2. Other information

**Other information:** Not applicable.

## 10. STABILITY AND REACTIVITY

### Section 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

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**10.2. Chemical stability**

**Chemical stability:** Stable under normal conditions. Stable at room temperature.

**10.3. Possibility of hazardous reactions**

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

**10.4. Conditions to avoid**

**Conditions to avoid:** Heat. Sources of ignition. Flames.

**10.5. Incompatible materials**

**Materials to avoid:** Organic materials. Reducing agents. Strong acids. Strong bases.

**10.6. Hazardous decomposition products**

**Haz. decomp. products:** In combustion emits toxic fumes.

**11. TOXICOLOGICAL INFORMATION**

Route	Species	Test	Value	Units
ORAL	RAT	LD50	301	mg/kg

**Relevant hazards for substance:**

Hazard	Route	Basis
Acute toxicity (ac tox. 4)	ING	Based on test data
Skin corrosion/irritation	DRM	Based on test data
Serious eye damage/irritation	OPT	Based on test data
Germ cell mutagenicity	-	Based on test data
Carcinogenicity	-	Based on test data
STOT – single exposure	INH	Based on test data

**Excluded hazards for substance:**

Hazard	Route	Basis
Respiratory/skin sensitisation	-	Based on available data the classification criteria are not met
Reproductive toxicity	-	Based on available data the classification criteria are not met
STOT – repeated exposure	-	Based on available data the classification criteria are not met
Aspiration hazard	-	Classified as non-hazardous as it is technically impossible to obtain data

**Symptoms / routes of exposure**

**Skin contact:** Irritation or pain may occur at the site of contact. Blistering may occur. Severe burns may occur. Progressive ulceration will occur if treatment is not immediate.

**Eye contact:** There may be irritation and redness. There may be irritation and pain. There may be severe pain. The eyes may water profusely. The vision may become blurred. Corneal burns may occur.

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**Ingestion:** There may be irritation of the throat. Nausea and stomach pain may occur. There may be vomiting. There may be soreness and redness of the mouth and throat.

**Inhalation:** There may be a feeling of tightness in the chest with shortness of breath.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

**Other information:** Not applicable.

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

### 12.4. Mobility in soil

**Mobility:** Soluble in water.

### 12.5. Results of PBT and vPvB assessment

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

### 12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

## 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**Recovery operations:** Not applicable.

**Disposal of packaging:** Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## 14. TRANSPORT INFORMATION

### 14.1. UN number

**UN number:** UN1494

### 14.2. UN proper shipping name

**Shipping name:** SODIUM BROMATE

### 14.3. Transport hazard class(es)

**Transport class:** 5.1

## SODIUM BROMATE

#### 14.4. Packing group

Packing group: II

### 14.5. Environmental hazards

**Environmentally hazardous:** No **Marine pollutant:** No

#### 14.6. Special precautions for user

**Special precautions:** No special precautions.

Tunnel code: E

Transport category: 2

## 15. REGULATORY INFORMATION

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

**Specific regulations:** This product is a Seveso category/named substance in Annex I of Council Directive 96/82/EC.

## 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

## 16. OTHER INFORMATION

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.  
\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:**

- H271: May cause fire or explosion; strong oxidiser.
- H302: Harmful if swallowed.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.
- H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
- H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

**Legal disclaimer:** The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.