

Section 1. Identification**1.1 Product Identifier** 2123

Product Name	SODIUM BROMATE pure
CAS Number	7789-38-0
REACH Registration No	A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.
Molecular Formula	NaBrO_3 , =150.89

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material	Chemical for industrial and laboratory use. Not suitable for domestic use.
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1.3 Supplier Vickers Laboratories Ltd

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1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811
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(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Oxidising solid, category 1	H271: May cause fire or explosion; strong oxidizer.
Acute toxicity, category 4 (oral)	H302: Harmful if swallowed.
Skin corrosion/irritation, category 2	H315: Causes skin irritation.
Serious eye damage/irritation, category 2	H319: Causes serious eye irritation.
Germ cell mutagenicity, category 2	H341: Suspected of causing genetic defects.
Carcinogenicity, category 1B	H350: May cause cancer.
Spec target organ tox - single, category 3	H335: May cause respiratory irritation.

2.2 Label elements**Labelling according to regulation 1272/2008/EC**

Signal word	Danger
Hazard Pictograms	



Hazard Statements May cause fire or explosion; strong oxidizer. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Suspected of causing genetic defects. May cause cancer. May cause respiratory irritation.

Precautionary Statements Keep away from heat / sparks/open flames/hot surfaces - No smoking. Take any precaution to avoid mixing with combustibles... Wear fire/flame resistant/retardant clothing. Wash thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Sodium bromate	7789-38-0	232-160-4		>99%	Ox. Sol. 1, Acute Tox. 4 (O), Skin Irrit. 2, Eye Irrit. 2, Muta. 2, Carc. 1B, STOT SE 3 (I)

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water.
Inhalation	Remove from exposure. If material has reacted with an acid to form, nitrous fumes, Obtain immediate medical attention even if patient is not complaining of discomfort.
Ingestion	If conscious give plenty of water to drink. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Water spray.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards May evolve toxic fumes if involved in a fire. Mixtures with combustible materials are flammable. Mixtures with finely divided combustible materials can react explosively.

5.3 Advice for firefighters

Advice for firefighters Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Evacuate area immediately. If contact with acid is possible, use full protective clothing and breathing apparatus.

6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Shovel/sweep up into container for removal Wash area down with copious amounts of water.

Minor Spillage Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Store in a suitable area for oxidising agents. Keep well separated from combustible materials.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period	
Sodium bromate	7789-38-0	>99%	-	-	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.

Hand Protection Wear gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	White crystalline powder.
Odour	No specific odour.
pH	6 @ 20°C solution.
Boiling Point	Not available
Melting Point	381°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable

Explosive Properties	No.
Oxidising Properties	A strong oxidising agent.
Vapour Pressure	Not applicable
Relative Density	3.3400
Water Solubility	20%

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Heat, sparks and contact with combustible material.
10.5	Incompatible Materials	Flammable/combustible material, powdered metals and metal sulphides. Mixtures with grease are shock sensitive explosives at 120 C.
10.6	Hazardous Decomposition Products	Decomposes to form flammable oxygen and toxic, irritant bromine fumes.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Causes serious eye irritation.
Skin	Causes skin irritation.
LD50 Skin	Not available
Ingestion	Harmful if swallowed. Repeated small doses cause a fall in blood pressure, rapid pulse, headache and visual disturbances. Larger doses cause nausea, vomiting, cyanosis, collapse and coma.
LD50 Oral	400mg/kg Rat
Inhalation	May cause respiratory irritation.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	May cause cancer.
Mutagenicity	Suspected of causing genetic defects.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	Low levels are readily bio-degraded in the environment. Higher levels are toxic to marine and plant life.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Contaminated Packaging	Wash out containers with water.

Section 14. Transport Information


14.1 UN Number	1494
14.2 Proper Shipping Name	Sodium bromate
14.3 Transport classes	
UN classification	5.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	50
Tunnel Restriction Code	E
14.4 Packing Group	II
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification	Oxidising solid, category 1; Acute toxicity, category 4 (oral); Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2; Germ cell mutagenicity, category 2; Carcinogenicity, category 1B; Spec target organ tox - single, category 3
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H271, H302, H315, H319, H341, H350, H335 May cause fire or explosion; strong oxidizer. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Suspected of causing genetic defects. May cause cancer. May cause respiratory irritation.
Precautionary Statements	P210, P221, P283, P264, P305+P351+P338, P370+P380+P375 Keep away from heat / sparks/open flames/hot surfaces - No smoking. Take any precaution to avoid mixing with combustibles... Wear fire/flame resistant/retardant clothing. Wash thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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