

Section 1. Identification**1.1 Product Identifier** 1521

Product Name	ZINC BROMIDE pure
CAS Number	7699-45-8
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	$ZnBr_2$ =225.19

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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(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Skin corrosion/irritation, category 1B	H314: Causes severe skin burns and eye damage.
Acute toxicity, category 4 (oral)	H302: Harmful if swallowed.
Skin sensitization, category 1	H317: May cause an allergic skin reaction.
Hazard to aquatic environment, category 2	H411: Toxic to aquatic life with long lasting effects.

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

Signal word	Danger
Hazard Pictograms	



Hazard Statements Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

Precautionary Statements Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves / protective clothing / eye protection / face protection. **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting. **IF ON SKIN (or hair):** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Zinc bromide	7699-45-8	231-718-4		100%	Skin Corr. 1B, Acute Tox. 4 (O), Skin Sens. 1, Aquatic Chronic 2

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. If discomfort persists OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure. If breathing stops or shows signs of failing, apply artificial resuscitation. If there is difficulty in breathing give oxygen if available.
Ingestion	Wash out the patient's mouth thoroughly with water. Do not induce vomiting. OBTAIN MEDICAL ATTENTION.
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	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire.
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5.3 Advice for firefighters

Advice for firefighters	Fire-fighters should wear protective clothing and breathing apparatus.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Use approved personal protective equipment.
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6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil.

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 Shovel/sweep up into container for removal

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 . Ensure storage conditions are very dry as material has a very high tendency to cake.

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
Zinc bromide	7699-45-8	100%	-	-

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 chemical full face shield.
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 or granules.
Odour No specific odour.
pH 5.25 @ 22.9 °C
Boiling Point 697 °C
Melting Point 394 °C
Flash Point Not applicable
Upper Flammable Limit Not applicable
Lower Flammable Limit Not applicable
Auto Ignition Not applicable
Explosive Properties No.
Oxidising Properties No.
Vapour Pressure Not applicable
Relative Density 4.201

Water Solubility Moderately soluble in water.

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	No specific conditions.
10.5	Incompatible Materials	Sodium and potassium.
10.6	Hazardous Decomposition Products	May decompose to emit toxic and irritant fumes of hydrogen bromide.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Contact with the solid or dust will be extremely irritating to eyes and can cause chemical eye burns.
Skin	Contact with the solid or dust will cause burns. Contact with the solid or dust may be absorbed across the skin in harmful amounts.
LD50 Skin	>2000 mg/Kg Rabbit
Ingestion	Ingestion of large amounts may cause violent abdominal pain and vomiting.
LD50 Oral	1260 mg/Kg Mouse
Inhalation	Inhalation of dust will produce irritation of the eyes, nose, throat and respiratory tract. Prolonged exposure to dust or fume concentrations above the occupational exposure limits may cause breathing problems, leading to bronchitis, pulmonary oedema and eventually unconsciousness.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	Toxic to aquatic species and may cause long term adverse effects in the aquatic environment.
	LC50 Algal	0.136 mg Zn/L Algae
	LC50 Crustacea	0.228 mg Zn/L Daphnia (48 hours)
	LC50 Fish	0.169 mg Zn/L Rainbow Trout (96 hours)
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 Never dispose of into water courses or sewerage systems. Dispose of to a licensed land fill site.

Contaminated Packaging Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	3260
14.2 Proper Shipping Name	Corrosive solid, acidic, inorganic, N.O.S. (Zinc Bromide)
14.3 Transport classes	
UN classification	8
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	80
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 Skin corrosion/irritation, category 1B; Acute toxicity, category 4 (oral); Skin sensitization, category 1; Hazard to aquatic environment, category 2

Signal word Danger

Hazard Pictograms



Hazard Statements H302, H314, H317, H411
Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

Precautionary Statements P264, P270, P280, P301+P330+P331, P303+P361+P353, P305+P351+P338
Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves / protective clothing / eye protection / face protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

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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