

# Material Safety Data Sheet

## Zinc bromide

ACC# 25320

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Zinc bromide

**Catalog Numbers:** AC202100000, AC202101000, AC202105000, AC212770000, AC212770025, AC212770100, NC9437063, Z27-500

**Synonyms:** Zinc dibromide.

**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100

**Emergency Number:** 201-796-7100

**For CHEMTREC assistance, call:** 800-424-9300

**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7699-45-8	Zinc bromide	100	231-718-4

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: off-white solid.

**Warning!** May cause severe eye and skin irritation with possible burns. May cause severe respiratory and digestive tract irritation with possible burns. Hygroscopic (absorbs moisture from the air).

**Target Organs:** Nervous system.

#### Potential Health Effects

**Eye:** Contact with eyes may cause severe irritation, and possible eye burns.

**Skin:** May cause severe skin irritation with possible burns, especially if skin is wet or moist.

**Ingestion:** May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns.

**Inhalation:** May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation.

**Chronic:** Prolonged exposure may cause mental changes such as hallucinations, depression, psychosis, and possibly coma.

### Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Treat symptomatically and supportively. Get medical aid immediately.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:** Treat symptomatically and supportively.

### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use extinguishing media most appropriate for the surrounding fire.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: ; Flammability: ; Instability:

### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

**Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Zinc bromide	none listed	none listed	none listed

**OSHA Vacated PELs:** Zinc bromide: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** off-white

**Odor:** odorless

**pH:** ~4

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 650 deg C

**Freezing/Melting Point:** 394 deg C

**Decomposition Temperature:** 697 deg C

**Solubility:** Soluble in water.

**Specific Gravity/Density:** 4.201

**Molecular Formula:** ZnBr<sub>2</sub>

**Molecular Weight:** 225.188

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, moisture, excess heat.

**Incompatibilities with Other Materials:** Explosive when mixed with sodium and potassium.

**Hazardous Decomposition Products:** Hydrogen bromide, toxic fumes of zinc oxide.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

### RTECS#:

**CAS#** 7699-45-8: ZH1150000

### LD50/LC50:

Not available.

### Carcinogenicity:

CAS# 7699-45-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** No information available.

**Neurotoxicity:** No information available.

**Other Studies:**

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	Not regulated as a hazardous material	No information available.
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 7699-45-8 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

CAS# 7699-45-8: 1000 lb final RQ; 454 kg final RQ

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### Section 313

This material contains Zinc bromide (listed as Zinc compounds), 100%, (CAS# 7699-45-8) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

#### Clean Water Act:

CAS# 7699-45-8 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA. CAS# 7699-45-8 is listed as a Toxic Pollutant under the Clean Water Act.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 7699-45-8 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

### European/International Regulations

#### European Labeling in Accordance with EC Directives

##### Hazard Symbols:

XI

##### Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

##### Safety Phrases:

S 28 After contact with skin, wash immediately with...

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 7/8 Keep container tightly closed and dry.

#### WGK (Water Danger/Protection)

CAS# 7699-45-8: No information available.

#### Canada - DSL/NDSL

CAS# 7699-45-8 is listed on Canada's DSL List.

#### Canada - WHMIS

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

#### Canadian Ingredient Disclosure List

CAS# 7699-45-8 is not listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 2/12/1998

**Revision #3 Date:** 11/19/2004

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*