Zinc bromide

02128-500G

Version 1.1 Revision Date 07/03/2020 Print Date 05/29/2023

SECTION 1. IDENTIFICATION

Product name	:	Zinc bromide
Number	:	000000021243
Product Use Description	:	Laboratory chemicals
Manufacturer or supplier's details	:	Honeywell Specialty Chemicals Seelze GmbH Wunstorfer Straße 40 Seelze, 30926
For more information call	:	1-800-368-0050 +1-231-726-3171(Monday-Friday, 9:00am-5:00pm)
In case of emergency call	:	**Medical: 1-800-498-5701 or +1-303-389-1414**
	:	**Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887**
	:	
	:	(24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Form	:	solid
Color	:	colourless
Odor	:	odourless

Classification of the substance or mixture

Classification of the substance or mixture	:	Corrosive to metals, Category 1 Acute toxicity, Category 4, Oral Skin corrosion, Category 1B Serious eye damage, Category 1 Skin sensitisation, Category 1

GHS Label elements, including precautionary statements

Symbol(s) :

Signal word : Danger

Hazard statements : May be corrosive to metals.
Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.

Precautionary statements : **Prevention:**
Keep only in original container.
Do not breathe dust or mist.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.

Response:
IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
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 INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/ doctor.
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.

Storage:
Store locked up.
Store in corrosive resistant container with a resistant inner liner.

Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : Br2Zn

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Zinc bromide	7699-45-8	100.00 %

SECTION 4. FIRST AID MEASURES

General advice : First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation : If breathed in, move person into fresh air. Call a physician immediately.

Skin contact : Wash off immediately with soap and plenty of water. Call a physician immediately.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Protect unharmed eye. Remove contact lenses. Call a physician immediately.

Ingestion : Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call a physician immediately.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water spray Foam Carbon dioxide (CO2) Dry chemical
Specific hazards during firefighting	:	In case of fire hazardous decomposition products may be produced such as: Hydrogen bromide Zinc oxide fumes.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus and protective suit.
Further information	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Evacuate personnel to safe areas. Wear personal protective equipment. Unprotected persons must be kept away. Avoid dust formation. Ensure adequate ventilation. Do not breathe dust. Do not get in eyes, on skin, or on clothing.
Environmental precautions	:	Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Use mechanical handling equipment. Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with local regulations.
Additional advice	:	Spilling onto the container's outside will make container slippery.

SECTION 7. HANDLING AND STORAGE

Handling

Precautions for safe handling	:	Wear personal protective equipment. Use only in well-ventilated areas. Do not breathe dust. Do not get in eyes, on skin, or on clothing.
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.

Storage

Conditions for safe storage, including any incompatibilities	:	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from atmospheric moisture and water. Recommended storage temperature: room temperature. (Ambient temperature: > 0 < 35°C)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures	:	Ensure that eyewash stations and safety showers are close to the workstation location. Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment. Do not breathe dust. Do not get in eyes, on skin, or on clothing.
Engineering measures	:	Use with local exhaust ventilation.
Eye protection	:	Wear as appropriate: Goggles or face shield, giving complete protection to eyes
Hand protection	:	Impervious gloves Gloves must be inspected prior to use. Replace when worn.
Skin and body protection	:	Protective suit
Respiratory protection	:	In case of insufficient ventilation, wear suitable respiratory

equipment.

Hygiene measures : Separate rooms are required for washing, showering and changing clothes.
Keep working clothes separately.
Contaminated work clothing should not be allowed out of the workplace.
Regular cleaning of equipment, work area and clothing.

Exposure Guidelines
Contains no substances with occupational exposure limit values.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	solid
Color	:	colourless
Odor	:	odourless
Odor threshold	:	Note: no data available
pH	:	Note: acidic
Melting point/range	:	394 °C
Boiling point/boiling range	:	697 °C at 1,013 hPa
Flash point	:	Note: Not applicable
Evaporation rate	:	Note: no data available
Flammability	:	The product is not flammable.
Lower explosion limit	:	Note: Not applicable
Upper explosion limit	:	Note: Not applicable

Vapor pressure	:	Note: not determined
Vapor density	:	Note: not determined
Density	:	ca. 4.22 g/cm3 at 20 °C
Water solubility	:	4,470 g/l at 20 °C
Partition coefficient: n-octanol/water	:	Note: no data available
Ignition temperature	:	Note: Not applicable
Auto-ignition temperature	:	Note: Not applicable
Viscosity, dynamic	:	Note: Not applicable
Viscosity, kinematic	:	Note: Not applicable
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Molecular weight	:	225.19 g/mol
Bulk density	:	ca. 1,500 kg/m3
Corrosivity	:	Note: Corrosive to metals

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.

Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Hazardous polymerisation does not occur.
Conditions to avoid	:	Protect from atmospheric moisture and water. Corrodes metals in the presence of water or moisture.
Incompatible materials	:	Strong bases Metals Corrosive in contact with metals
Hazardous decomposition products	:	In case of fire hazardous decomposition products may be produced such as: Hydrogen bromide Zinc oxide fumes.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50: 1,477 mg/kg Species: Rat, male and female
Acute inhalation toxicity	:	Note: no data available
Acute dermal toxicity	:	LD50: > 2,000 mg/kg Species: Rabbit
Skin irritation	:	Species: Rabbit Result: Category 1B Classification: Causes burns. Method: OECD Test Guideline 404
Eye irritation	:	Species: Rabbit Result: Severe eye irritation Classification: Risk of serious damage to eyes.

Sensitisation	:	Maximisation Test Species: Guinea pig Result: Causes sensitisation. Classification: May cause sensitisation by skin contact. Method: OECD Test Guideline 406
Genotoxicity in vitro	:	Cell type: Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish	:	semi-static test LC50: 115.9 mg/l Exposure time: 96 h Species: Fish Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	static test EC50: 8.8 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202
Toxicity to algae	:	static test EC50: 6.6 mg/l Exposure time: 72 h Species: Phaeodactylum tricornutum

Elimination information (persistence and degradability)

Biodegradability	:	Note: Not applicable

Further information on ecology

Additional ecological information	:	Do not flush into surface water or sanitary sewer system. The methods for determining biodegradability are not applicable to inorganic substances.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	:	Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT	UN/ID No.	:	UN 3260
	Proper shipping name	:	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Zinc bromide)
	Class		8
	Packing group		II
	Hazard Labels		8
IATA	UN/ID No.	:	UN 3260
	Description of the goods	:	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Zinc bromide)
	Class	:	8
	Packaging group	:	II
	Hazard Labels	:	8
	Packing instruction (cargo aircraft)	:	863
	Packing instruction (passenger aircraft)	:	859
	Packing instruction (passenger aircraft)	:	Y844
IMDG	UN/ID No.	:	UN 3260
	Description of the goods	:	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (ZINC BROMIDE)
	Class	:	8

Packaging group	:	II
Hazard Labels	:	8
EmS Number	:	F-A, S-B
Marine pollutant	:	yes
IMDG Code segregation group		1 – ACIDS,

SECTION 15. REGULATORY INFORMATION

Inventories

US. Toxic Substances Control Act	:	On TSCA Inventory
Australia. Industrial Chemical (Notification and Assessment) Act	:	On the inventory, or in compliance with the inventory
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)	:	All components of this product are on the Canadian DSL
Japan. Kashin-Hou Law List	:	On the inventory, or in compliance with the inventory
Korea. Toxic Chemical Control Law (TCCL) List	:	On the inventory, or in compliance with the inventory
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	:	On the inventory, or in compliance with the inventory
China. Inventory of Existing Chemical Substances (IECSC)	:	On the inventory, or in compliance with the inventory
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	:	On the inventory, or in compliance with the inventory

National regulatory information

SARA 302 Components	:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	:	The following components are subject to reporting levels established by SARA Title III, Section 313:
	:	Zinc bromide 7699-45-8
SARA 311/312 Hazards	:	Acute Health Hazard
CERCLA Reportable Quantity	:	1000 lbs
California Prop. 65	:	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts RTK	:	Zinc bromide	7699-45-8
New Jersey RTK	:	Zinc bromide	7699-45-8
Pennsylvania RTK	:	Zinc bromide	7699-45-8

SECTION 16. OTHER INFORMATION

		HMIS III	NFPA
Health hazard	:	3	3
Flammability	:	0	0
Physical Hazard	:	0	
Instability	:		0

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information

and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.
Previous Issue Date: 12/14/2016
Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group