

WINDIA CHEMICALS PRIVATE LIMITED

130/1-9, Thinnanur Road, Pulivalam Post,
Musiri Tk, Trichy Dist Pin:621006.

SAFETY DATA SHEET

POTASSIUM BROMATE (KBrO₃)

1. Product Identification

Synonyms	: Bromic Acid; Potassium Salt
CAS No	: 7758-01-2
Molecular Weight	: 167.00
Chemical Formula	: KBrO ₃
	: Windia Chemicals P. Ltd, 41, 3 rd street, V.G.P Layout, Injambakkam, Chennai-600041. info@windiachemical.com

2. Hazards Identification

Emergency Overview

OSHA Hazards:	: Oxidizer, Carcinogen, Target Organ Effect, Toxic by ingestion
Target Organs:	: Kidney, ears, Liver, Central nervous system
GHS Classification	: Oxidizing solids (Category 1) : Acute toxicity, Oral (Category 3) : Carcinogenicity (Category 1B)
	GHS Label elements, including precautionary statements

Pictograms



Signal Word	: Danger
Hazard statement(s)	
H301	: Toxic if swallowed.
H350	: May cause cancer.

	Precautionary statement(s)
P201	: Obtain special instructions before use.
P220	: Keep/Store away from clothing/ combustible materials.

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P301 + P310	: IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P308 + P313	: IF exposed or concerned: Get medical advice/ attention.

Hazardous Materials Identification System (HMIS) Classification

Physical hazards	: 2 (Moderate)
Chronic Health Hazard	: *
Flammability	: 0 (None)
Personal hazards	: 2 (Moderate)

National Fire Protection Association (NFPA) Rating

Health Rating	: 2 – Moderate (Cancer)
Flammability Rating	: 0 - None
Reactivity Rating	: 3 - Severe (Oxidizer)
Contact Rating	: 2 - Moderate (Life)

Potential Health Effects

Inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Skin	: May be harmful if absorbed through skin. May cause skin irritation.
Eyes	: May cause eye irritation.
Ingestion	: Toxic if swallowed.

3. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Potassium Bromate	7758-01-2	100%	Yes

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4. First Aid Measures

Inhalation	: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	: Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Skin Contact	: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye Contact	: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire	: Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. : Forms very flammable mixtures with combustible materials and may be explosive if the combustible material is very finely divided. Can be ignited by friction.
Explosion	: Sealed containers may rupture when heated. : Sensitive to mechanical impact.
Fire Extinguishing Media	: Use any means suitable for extinguishing surrounding fire. : Do not allow water runoff to enter sewers or waterways.
Special Information	: In the event of a fire, wear full protective clothing and NIOSH- approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. : Water spray may be used to keep fire exposed containers cool.

6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 9. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

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7. Handling and Storage

Keep in a tightly closed container, store in a cool, dry, ventilated area. Protect against physical damage and moisture. Isolate from any source of heat or ignition. Avoid storage on wood floors. Separate from incompatibles, combustibles, organic or other readily oxidizable materials. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits	: AIHA Workplace Environmental Exposure Level (WEEL):10 mg/m ³ , 8-hour, TWA
Ventilation System	: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can Control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. : Please refer to the ACGIH document, <i>Industrial Ventilation, A Manual of Recommended Practices</i> , most recent edition, for details.
Personal Respirators (NIOSH Approved)	: If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or letter filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. : A full- face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. : For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. : WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection	: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Eye Protection	: Use chemical safety goggles and/or full-face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

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9. Physical and Chemical Properties

Appearance	: White powder or granules.
pH	: Neutral
Odour	: Odourless.
Boiling Point	: 370°C (698°F).
Melting Point	: 350°C (662°F).
Solubility	: 13.3 g/100ml water @ 40°C
Upper or lower flammability limits	: No information available
Vapour threshold	: No information available
Odour threshold	: No information available
Vapour density	: No information available
Flash point	: No information available
Evaporation Rate	: No information available
Flammability	: No information available
Partition Coefficient: n-Octanol/water	: No information available
Auto Ignition Temperature	: No information available
Decomposition Temperature	: 370°C (698°F)
Viscosity	: No information available.

10. Stability and Reactivity

Stability	: Stable under ordinary conditions of use and storage. Contact with oxidizable substances may cause extremely violent combustion. Explosion risk as a result of shock or friction from mixtures with combustible substances. Containers may rupture in a fire.
Hazardous Decomposition Products	: Emits oxygen and toxic fumes of bromine when heated to decomposition.
Hazardous Polymerization	: Will not occur
Incompatibilities	: Acids, reducing agents, organic material, aluminium, arsenic, calcium hydride, carbon, copper, powder metals, metal sulphides, phosphonium iodine, phosphorus, lead acetate, selenium, and sulphur.
Conditions to Avoid	: Heat, flame, moisture, dusting, sources of ignition and shock, and incompatibles.

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11. Toxicological Information

Component Information

Component	LD50 Oral	LD50 Dermal
Potassium Bromate	157 mg/Kg (Rat)	Not listed

CAS#	7758-01-2.
Carcinogenicity	Possible Human carcinogen.
Epidemiology	No information available.
Teratogenicity	No information available.
Reproductive Effects	No information available.
Mutagenicity	No information available.
Neurotoxicity	No information available.
Aspiration Hazard	No information available.
Specific Target Organ Toxicity-single	No information available.
Specific Target Organ Toxicity-Repeat	No information available.

Potential Health Effects

Inhalation	: Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.
Ingestion	: Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhoea. May cause abdominal pain, reduced urinary output, low blood pressure, methemoglobinemia, convulsions, liver and kidney damage, and coma. Cyanosis may occur as a later symptom. Death may occur from renal failure, within 1 to 2 weeks. Estimated lethal dose is 4 grams.
Skin Contact	: Causes irritation to skin. Symptoms include redness, itching, and pain. In the presence of moisture, it is slowly absorbed in toxic amounts. Prolonged exposure may cause burns.
Eye Contact	: Causes irritation with redness, pain. May cause eye damage. : Chronic Exposure: Overexposure may cause kidney damage
Aggravation of Pre-existing Conditions	: Persons with pre-existing skin disorders or eye problems, or impaired liver, kidney or respiratory function may be more susceptible to the effects of the substance.

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12. Ecological Information

Environmental Fate: No information found

Environmental Toxicity: No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Domestic (Land, D.O.T.)	
Proper Shipping Name	: POTASSIUM BROMATE
Hazard Class	: 5.1
UN/NA	: UN1484
Packing Group	: II
Information reported for product/size	: 500G

International (Water, I.M.O.)	
Proper Shipping Name	: POTASSIUM BROMATE
Hazard Class	: 5.1
UN/NA	: UN1484
Packing Group	: II
Information reported for product/size	: 500G

International (Air, I.C.A.O.)	
Proper Shipping Name	: POTASSIUM BROMATE
Hazard Class	: 5.1
UN/NA	: UN1484
Packing Group	: II
Information reported for product/size	: 500G

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15. Regulatory Information

\Chemical Inventory Status - Part 1\

Ingredient	TSCA	EC	Japan	Australia
Potassium Bromate (7758-01-2)	Yes	Yes	Yes	Yes

\Chemical Inventory Status - Part 2\

Ingredient	--Canada--			
	Korea	DSL	NDSL	Phil.
Potassium Bromate (7758-01-2)	Yes	Yes	No	Yes

\Federal, State & International Regulations - Part 1\

Ingredient	RQ	TPQ	-SARA 302- List	---SARA 313--- Chemical Catg.
Potassium Bromate (7758-01-2)	No	No	Yes	No

\Federal, State & International Regulations - Part 2\

Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
Potassium Bromate (7758-01-2)	No	No	No

Chemical Weapons Convention: No

TSCA 12(b): No

CDTA: No

SARA 311/312: Acute: Yes

Chronic: Yes

Fire: Yes

Pressure: No

Reactivity: No (Pure / Solid)

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

Australian Hazchem Code : 1YE

Poison Schedule : None allocated.

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

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16. Other Information

Version no: : WCPL-KBrO₃-SDS-001
Date of creation : 01-11-2019
E-mail ID : info@windiachemicals.com

Disclaimer:

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 purposes. In no event shall Windia chemicals 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 Windia chemicals has been advised of the possibility of such damages.



Approved By QC Manager
Govindaraj 26/02/2022