

# OTTO CHEMIE PVT LTD

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ISO 9001: 2015

## MATERIAL SAFETY DATA SHEET

### Section 1 - Chemical Product and Company Identification

Barium peroxide

Code B 1355

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1304-29-6	Barium Peroxide	100	215-128-4

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: gray-white solid.

Danger! Strong oxidizer. Contact with other material may cause a fire. Causes respiratory tract irritation. Causes eye and skin irritation. Causes severe digestive tract irritation with pain, nausea, vomiting and diarrhea. May corrode the digestive tract with hemorrhaging and possible shock. May cause central nervous system effects. May cause cardiac disturbances.

Target Organs: Central nervous system, muscles, cardiovascular system.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation.

Ingestion: Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause respiratory failure. May cause circulatory system failure. May cause hemorrhaging of the digestive tract. Causes potassium deficiency and may affect the function of the heart and central nervous system. Symptoms may include salivation, vomiting, severe abdominal pain, violent purging, cardiac rhythm changes, dilated pupils, confusion, dizziness, muscle tremors, convulsions, paralysis, and death.

Inhalation: Causes respiratory tract irritation. May cause effects similar to those described for ingestion.

Chronic: No information found.

### Section 4 - First Aid Measures

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

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

Ingestion: Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

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

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. Strong oxidizer. Contact with other material may cause fire.

Extinguishing Media: Use water spray to cool fire-exposed containers. Use water only!

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 1; Special Hazard: OX

### Section 6 - Accidental Release Measures

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

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Remove all sources of ignition.

### Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Wash hands before eating. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid contact with clothing and other combustible materials. Avoid ingestion and inhalation.

Storage: Do not store near combustible materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

### Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

#### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Barium Peroxide	0.5 mg/m <sup>3</sup> TWA (listed under Barium).	none listed	0.5 mg/m <sup>3</sup> TWA (listed under Barium).

OSHA Vacated PELs: Barium Peroxide: 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 gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: gray-white

Odor: odorless

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 1427 deg F

Freezing/Melting Point: 842 deg F

Decomposition Temperature: 1427 deg F

Solubility: Slightly soluble in water.

Specific Gravity/Density: 4.96

Molecular Formula: BaO<sub>2</sub>

Molecular Weight: 169.3288

#### Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, moisture, exposure to air, contact with water, combustible materials.

Incompatibilities with Other Materials: Corrodes metal. Explodes on contact with acetic anhydride producing acetyl peroxide, reacts violently with propane when heated, ignites when mixed with calcium-silicone alloys, powdered aluminum, powdered magnesium, and water + organic compounds, and ignites wood with the friction it creates. Incompatible with hydrogen sulfide, water, peroxyformic acid, hydroxylamine solution, organic matter and a mixture of manganese, zinc, and barium nitrate.

Hazardous Decomposition Products: Barium oxide, oxygen.

Hazardous Polymerization: Has not been reported.

#### Section 11 - Toxicological Information

RTECS#:

CAS# 1304-29-6: CR0175000

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 1304-29-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found

Teratogenicity: No information found

Reproductive Effects: No information found

Mutagenicity: No information found

Neurotoxicity: No information found

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
Shipping Name:	BARIUM PEROXIDE	No information available.
Hazard Class:	5.1	
UN Number:	UN1449	
Packing Group:	II	

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 1304-29-6 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

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 1304-29-6: immediate, reactive.

#### Section 313

This material contains Barium Peroxide (listed as Barium), 100%, (CAS# 1304-29-6) 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:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

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

#### STATE

CAS# 1304-29-6 can be found on the following state right to know lists: 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:

XN O

#### Risk Phrases:

R 20/22 Harmful by inhalation and if swallowed.

R 8 Contact with combustible material may cause fire.

#### Safety Phrases:

S 13 Keep away from food, drink and animal feeding stuffs.

S 27 Take off immediately all contaminated clothing.

#### WGK (Water Danger/Protection)

CAS# 1304-29-6: 1

#### Canada - DSL/NDSL

CAS# 1304-29-6 is listed on Canada's DSL List.

#### Canada - WHMIS

This product has a WHMIS classification of E.

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# 1304-29-6 is not listed on the Canadian Ingredient Disclosure List.

## Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.