

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

BARIUM PEROXIDE 86% EXTRA PURE
CAS-No.: 1304-29-6
Product Code: 00348
Molecular Formula: BaO₂

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Substance
Trade name : Barium Peroxide 86% Extra Pure
EC-No. : 215-128-4
CAS-No. : 1304-29-6
Synonyms : Barium Dioxide

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Company : Chemnovo Synthesis Pvt Ltd.
N-226 Near Kumbhavali Naka
Tarapur MIDC, Boisar-401 506
Palghar, Maharashtra
Telephone : +91 7400096089
Email: export@chemnovo.in

1.4. Emergency telephone number

Emergency number : + 91 7400096089 (9:00am - 6:00 pm)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidising Solids, H272
Category 2
Acute toxicity (oral), H302
Category 4
Acute toxicity (inhal.), H332
Category 4

Full text of classification categories and H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

O; R8
Xn; R20/22

Full text of R-phrases: see section 16

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Chemnovo
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Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS03



GHS07

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H272 - May intensify fire; oxidiser

H302+H332 - Harmful if swallowed or if inhaled

Precautionary statements (CLP) :

P220 - Keep/Store away from clothing, combustible materials

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : Barium Peroxide 86% Extra Pure

CAS-No. : 1304-29-6

EC-No. : 215-128-4

Full text of R- and H-statements: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Get immediate medical advice/attention. Wash with plenty of soap and water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : Harmful if inhaled.

Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : May cause fire or explosion; strong oxidiser.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Hazardous decomposition products in :
case of fire Thermal decomposition generates : Toxic fumes may be released.

5.3. Advice for firefighter

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

General measures : No naked lights. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Additional hazards when processed : Hazardous waste due to potential risk of explosion.

Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe vapours. Take precautionary measures against static discharge. Provide good

ventilation in process area to prevent formation of vapour.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep in fireproof place. Keep container tightly closed.

Incompatible materials : Heat sources. combustible materials.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

No additional information available

8.2. Exposure controls

Personal protective equipment : Wear fire/flame resistant/retardant clothing.

Hand protection : Protective gloves

Eye protection : Chemical goggles or safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	:	Solid
Colour	:	Off white powder.
Odour	:	odourless.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	450 °C
Freezing point	:	No data available
Boiling point	:	800 °C
Flash point	:	21 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	4.96 g/cm ³

Solubility	:	Water: Insoluble in water
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	May cause fire or explosion; strong oxidiser
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

No additional information available

10.2. Chemical stability

May cause fire or explosion; strong oxidiser

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Sparks. Open flame.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity	:	Oral: Harmful if swallowed. Inhalation: Harmful if inhaled.
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified
Potential adverse human health effects and symptoms	:	Harmful if swallowed

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Product/Packaging disposal recommendations	:	Dispose of contents/container to ...
Additional information	:	Hazardous waste due to potential risk of explosion.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR)	:	1449
UN-No. (IMDG)	:	1449
UN-No. (IATA)	:	1449
UN-No. (ADN)	:	1449
UN-No. (RID)	:	1449

14.2. UN proper shipping name

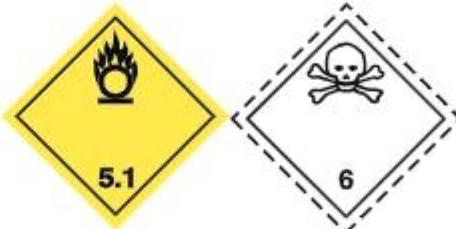
Proper Shipping Name (ADR)	:	BARIUM PEROXIDE
Proper Shipping Name (IMDG)	:	BARIUM PEROXIDE
Proper Shipping Name (IATA)	:	BARIUM PEROXIDE
Proper Shipping Name (ADN)	:	BARIUM PEROXIDE
Proper Shipping Name (RID)	:	BARIUM PEROXIDE
Transport document description (ADR)	:	UN 1449 BARIUM PEROXIDE, 5.1 (6.1), II, (E)
Transport document description (IMDG)	:	UN 1449 BARIUM PEROXIDE, 5.1 (6.1), II
Transport document description (IATA)	:	UN 1449 BARIUM PEROXIDE, 5.1, II
Transport document description (ADN)	:	UN 1449 BARIUM PEROXIDE, 5.1 (6.1), II
Transport document description (RID)	:	UN 1449 BARIUM PEROXIDE, 5.1 (6.1), II

14.3. Transport hazard class(es)

MATERIAL SAFETY DATA SHEET (SDS/MSDS)**BARIUM PEROXIDE 86% EXTRA PURE****CAS-No.: 1304-29-6****Chemnovo**
DRIVEN BY CHEMISTRY, DEFINED BY PRECISION**ADR**

Transport hazard class(es) (ADR) : 5.1 (6.1)
Danger labels (ADR) : 5.1, 6.1

:

**IMDG**

Transport hazard class(es) (IMDG) : 5.1 (6.1)
Danger labels (IMDG) : 5.1, 6.1

:

**IATA**

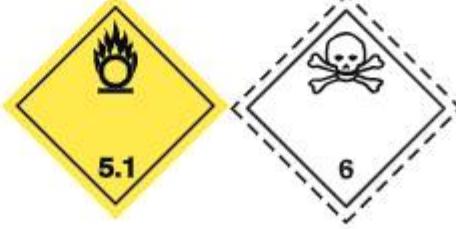
Transport hazard class(es) (IATA) : 5.1 (6.1)
Hazard labels (IATA) : 5.1, 6.1

:

**AND**

Transport hazard class(es) (ADN) : 5.1 (6.1)
Danger labels (ADN) : 5.1, 6.1

:

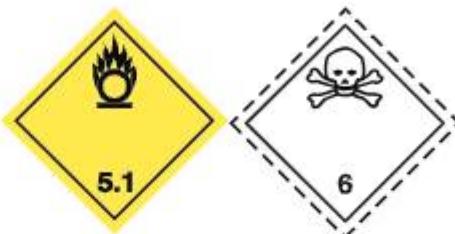


RID

Transport hazard class(es) (RID) : 5.1 (6.1)

Danger labels (RID) : 5.1, 6.1

:



14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : O2

Limited quantities (ADR) : 1kg

Excepted quantities (ADR) : E2

Packing instructions (ADR) : P002, IBC08

Mixed packing provisions (ADR) : Mp2

Portable tank and bulk container

instructions (ADR) : T3

Portable tank and bulk container special

provisions (ADR) : Tp33

Tank code (ADR) : SGAN

Tank special provisions (ADR) : Tu3

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Special provisions for carriage - Packages

(ADR) : V11

Special provisions for carriage - Loading,

unloading and handling (ADR) : CV24, Cv28

Hazard identification number

(Kemler No.) : 56

Orange plates

56
1449

Tunnel restriction code (ADR)	:	E
EAC code	:	1Y
- Transport by sea		
Limited quantities (IMDG)	:	1 kg
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P002
IBC packing instructions (IMDG)	:	IBC06
IBC special provisions (IMDG)	:	B2
Tank instructions (IMDG)	:	T3
Tank special provisions (IMDG)	:	Tp33
EmS-No. (Fire)	:	F-G
EmS-No. (Spillage)	:	S-Q
Stowage category (IMDG)	:	C
Stowage and handling (IMDG)	:	H1
Segregation (IMDG)	:	SG16, SG35, SG59, SG26, Sg36
MFAG-No	:	141
- Air transport		
PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y543
PCA limited quantity max net quantity (IATA)	:	1kg
PCA packing instructions (IATA)	:	558
PCA max net quantity (IATA)	:	5kg
CAO packing instructions (IATA)	:	562
CAO max net quantity (IATA)	:	25kg
ERG code (IATA)	:	5P
- Inland waterway transport		
Classification code (ADN)	:	Ot2
Special provisions (ADN)	:	802
Limited quantities (ADN)	:	1 kg
Excepted quantities (ADN)	:	E2
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	2
- Rail transport		
Classification code (RID)	:	Ot2
Limited quantities (RID)	:	1kg
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P002, ,IBC06

MATERIAL SAFETY DATA SHEET (SDS/MSDS)**BARIUM PEROXIDE 86% EXTRA PURE****CAS-No.: 1304-29-6****Mixed packing provisions (RID) :** Mp2**Portable tank and bulk container instructions (RID) :** T3**Portable tank and bulk container special provisions (RID) :** Tp33**Tank codes for RID tanks (RID) :** SGAN**Special provisions for RID tanks (RID) :** Tu3**Transport category (RID) :** 2**Special provisions for carriage – Packages (RID) :** W11**Special provisions for carriage – Loading, unloading and handling (RID) :** CW24, Cw28**Colis express (express parcels) (RID) :** Ce10**Hazard identification number (RID) :** 56**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

No REACH Annex XVII restrictions

Barium Peroxide 86% Extra Pure is not on the REACH Candidate List

Barium Peroxide 86% Extra Pure is not on the REACH Annex XIV List

15.1.2. National regulations**Germany****AwSV/VwVwS Annex reference :** Water hazard class (WGK) 1, Slightly hazardous to water (Classification according VwVwS, Annex 2; WGK No 307)

12th Ordinance Implementing the Federal

Immission Control Act – 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Denmark**Class for fire hazard :** Class I-1**Store unit :** 1 liter**Classification remarks :** F <Ox. Sol. 2>; Emergency management guidelines for the storage of flammable liquids must be followed**Recommendations Danish Regulation :** Young people below the age of 18 years are not allowed to use the product**15.2. Chemical safety assessment**

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Ox. Sol. 2	Oxidising Solids, Category 2
H272	May intensify fire; oxidiser
H302	Harmful if swallowed
H332	Harmful if inhaled
R20/22	Harmful by inhalation and if swallowed
R8	Contact with combustible material may cause fire
O	Oxidising
Xn	Harmful

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Chemnovo Synthesis Pvt Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.chemnovo.in for additional terms and conditions of sale.

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