



MATERIAL SAFETY DATA SHEET

CONTACT : **LEONID CHEMICALS**
62/A-2 2nd Stage, Industrial Suburb
Ashokpuram School Road, Yeshwanthpur
Bangalore-560 022, INDIA
Ph: +91-80-2337 8354, Fax: +91-80-2357

Barium chloride dihydrate, p.a.

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name:

Barium chloride dihydrate, p.a.

Catalog Numbers:

20313-0000, 20313-0010, 20313-5000, 38029-0000

Synonyms:

Barium dichloride dihydrate

Company Information:

LEONID CHEMICALS

62/A-2 1st Stage, Yeshwanthpur Industrial Suburb

Ashokpuram School Road

Bangalore-560 022, Karnataka, INDIA

Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

SECTION 2- COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	10326-27-9
Chemical Name	:	Barium chloride dihydrate
%	:	Unlisted
EINECS#	:	Unlisted
Hazard Symbols	:	T
Risk Phrases	:	25 20

SECTION 3- HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Toxic if swallowed. Harmful by inhalation.

Potential Health Effects

Eye:

Contact produces irritation, tearing, and burning pain. May cause conjunctivitis.

Skin:

May cause skin irritation. May be harmful if absorbed through the skin.



Ingestion:

Poison by ingestion. May cause kidney damage. May cause severe digestive tract irritation with abdominal pain, nausea, vomiting and diarrhea. May cause hemorrhaging of the digestive tract.

Inhalation:

Harmful if inhaled. May cause respiratory tract irritation. May cause effects similar to those described for ingestion.

Chronic:

No information available.

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.

Skin:

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

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

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:

No information available.

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.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

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 generating dusty conditions.

SECTION 7 - HANDLING AND STORAGE

Handling:

Minimize dust generation and accumulation. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage:

Store in a cool, dry place. Store in a tightly closed container.

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 ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes:

Wear chemical goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Crystals
Color	:	White.
Odor	:	No information available.
PH	:	5-8 (5% aq.solution)
Vapor Pressure	:	Negligible.
Viscosity	:	Not applicable.
Boiling Point	:	1560 deg C
Freezing/Melting Point	:	962 deg C
Autoignition Temperature	:	No information available.
Flash Point	:	No information available.
Explosion Limits, lower	:	No information available.
Explosion Limits, upper	:	No information available.
Decomposition Temperature	:	>100 deg C
Solubility in water	:	Soluble.
Specific Gravity/Density	:	No information available.
Molecular Formula	:	BaCl ₂ .2H ₂ O
Molecular Weight	:	244.28

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources, excess heat.

Incompatibilities with Other Materials:

Strong oxidizing agents, bromine trifluoride, 2-furan + percarboxylic acid.

Hazardous Decomposition Products:

Hydrogen chloride, chlorine.

Hazardous Polymerization:

Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:
CAS# 10326-27-9: Cq8751000

LD50/LC50:
No information available. BaCl₂ anhydrous: Oral, rat LD50: 118 mg/kg

Carcinogenicity:
Barium chloride dihydrate - Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:
Fish: Gold orfe: LC50: 870 ppm Barium chloride accumulates in plants when it exceeds calcium and magnesium levels in soil.

Other
Avoid entering into waters or underground water.

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

SECTION 14 - TRANSPORT INFORMATION

IATA
Shipping Name : BARIUM COMPOUND, N.O.S.
Hazard Class : 6.1
UN Number : 1564
Packing Group : III

IMO
Shipping Name : BARIUM COMPOUND, N.O.S.
Hazard Class : 6.1
UN Number : 1564
Packing Group : III

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RID/ADR
Shipping Name : BARIUM COMPOUND, N.O.S.
Hazard Class : 6.1
UN Number : 1564
Packing Group : III

SECTION 15 - REGULATORY INFORMATION

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:

T

Risk Phrases:

R 20 Harmful by inhalation. R 25 Toxic if swallowed.

Safety Phrases:

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

WGK (Water Danger/Protection)

CAS# 10326-27-9: 1

United Kingdom Occupational Exposure Limits

No information available.

United Kingdom Maximum Exposure Limits

No information available.

Canada

None of the chemicals in this product are listed on the DSL/NDSL list.

CAS# 10326-27-9 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 10326-27-9: OEL-AUSTRALIA: TWA 0.5 mg(Ba)/m³

OEL-AUSTRIA: TWA 0.5 mg(Ba)/m³

OEL-BELGIUM: TWA 0.5 mg(Ba)/m³

OEL-DENMARK: TWA 0.5 mg(Ba)/m³

OEL-FINLAND: TWA 0.5 mg(Ba)/m³

OEL-GERMANY: TWA 0.5 mg(Ba)/m³ (total dust)

OEL-HUNGARY: STEL 0.5 mg(Ba)/m³

OEL-THE NETHERLANDS: TWA 0.5 mg(Ba)/m³

OEL-THE PHILIPPINES: TWA 0.5 mg(Ba)/m³

OEL-POLAND: TWA 0.5 mg(Ba)/m³; STEL 1.5 mg(Ba)/m³

OEL-SWITZERLAND: TWA 0.5 mg(Ba)/m³; STEL 1 mg(Ba)/m³

OEL-TURKEY: TWA 0.5 mg(Ba)/m³

OEL-UNITED KINGDOM: TWA 0.5 mg(Ba)/m³

OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

US FEDERAL

TSCA

CAS# 10326-27-9 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

SECTION 16 - ADDITIONAL INFORMATION

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 way shall the company 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 the company has been advised of the possibility of such damages.

