

# Camlab Limited – Material Safety Data Sheet

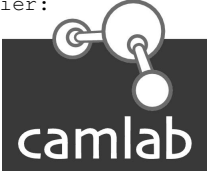
## 1. Identification

Product Code CC/1931-CO

Product Name **BARIUM CHLORIDE 2H<sub>2</sub>O A.R.**

Molecular Formula **BaCl<sub>2</sub>.2H<sub>2</sub>O =244.27**

CAS Number 10326-27-9

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## 2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Barium compounds (as Ba)	10326-27-9	233-788-1	56.2%	T : R20,R25	WEL

## 3. Hazards Identification



Harmful by inhalation. Toxic if swallowed.

## 4. First Aid Measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If discomfort persists OBTAIN MEDICAL ATTENTION.

Inhalation Remove from exposure. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation.

Ingestion Wash out the patients mouth thoroughly with water. If conscious give plenty of water to drink. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.

## 5. Fire Fighting Measures

Hazards May evolve toxic fumes if involved in a fire.

Extinguishing Media Consider what other flammable materials are present and act accordingly.

Unsuitable Media Nothing specified.

## 6. Accidental Release Measures

Personal Protection Avoid breathing dust-wear respiratory protective equipment. Do not allow other people to enter area. Do not allow general use of area until it is safe to do so.

Environmental Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

## 6. Accidental Release Measures (continued)

Major Spillage	Shovel/sweep up into container for removal Wash area down with copious amounts of water.
Minor Spillage	Shovel/sweep up into container for removal Wash area down with copious amounts of water.

## 7. Storage & Handling

Handling Precautions	Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.  Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.
Storage Conditions	Well ventilated, cool, dry storage .

## 8.1 Workplace Exposure Limits

Component	CAS No	Workplace Exposure Limits				Maximum Exposure Limits			
		Long Term		Short Term		Long Term		Short Term	
		ppm	mg m <sup>-3</sup>	ppm	mg m <sup>-3</sup>	ppm	mg m <sup>-3</sup>	ppm	mg m <sup>-3</sup>
Barium compounds (as Ba)	10326-27-9	-	0.5000	-	-	-	-	-	-

## 8.2 Personal Protection

Respiratory	If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.
Hands	Wear gloves.
Eyes	Use chemical splash proof glasses or goggles.
Skin	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

## 9. Physical & Chemical Properties

Appearance	White crystalline powder or granules.
Odour	No specific odour.
pH	7 (10% solution)
Boiling point	1560.0 °C
Melting point	960.0 °C
Flash point	Not available
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	Not available
Explosive properties	No.
Oxidising Properties	No.
Vapour Pressure	Not available
Relative Density	3.8560 °C
Water Solubility	36%

## 10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	No specific conditions.
Materials to Avoid	No specific materials to avoid.
Hazardous Decomposition Products	May produce hazardous fumes if involved in a fire.

## 11. Toxicological Information

Eyes	Contact with the solid or dust will be irritating to the eyes.
Skin	Contact with the solid or dust will be irritating to the skin. Chronic exposure may lead to dermatitis.
LD50 Skin	Not available

## 11. Toxicological Information (continued)

Ingest	Toxic if swallowed. May cause damage to central nervous system and kidneys. Soluble barium salts are rapidly absorbed from the G.I. tract and are very toxic orally. Symptoms include muscular stimulation and central nervous system effects. Fatal dose in humans is reported to be 0.8-0.9g but much larger amounts have been tolerated. Classed as an S1 poison.
LD50 Ingest	Human LDlo:80mg/Kg
Inhalation	Inhalation of dust will produce irritation of the eyes, nose, throat and respiratory tract. Inhalation of the dust can result in symptoms similar to those due to ingestion.
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

## 12. Ecological

Marine and/or freshwater pollutant. Do not allow to enter drinking water supplies. The following applies to Barium Compounds: biological effects; Fish, lethal from 158mg/l. Salmon lethal from 158mg/l: L.Idus LC50: 870mg/l [both as BaCl<sub>2</sub>]. Barium ions are toxic for aquatic organisms: algae: Sc. quadricauda toxic from 34mg/l: Crustaceans toxic from 29mg/l.

## 13. Disposal Considerations

Disposal Methods	Do not dispose of as domestic waste.
Contaminated Packaging	Wash out containers with water.

## 14. Transport Information

Proper Shipping Name	Barium compounds n.o.s.
UN Number	1564
UN Classification	6.1 Toxic
Subsidiary Risk	None
Flash Point	Not available
Packing Group	III
Transport Category	2
Marine pollutant	No
ADR Hazard ID	60



## 15. Regulatory Information

Labelling	Toxic.
Classification	

Label Symbols



Risk & safety Phrases	Harmful by inhalation. Toxic if swallowed. Keep locked up and out of reach of children. In case of accident or if you feel unwell, seek medical advice immediately (show the label).
EEC Number	233-788-1

## 16. Other Information

Document Information This document has been prepared in accordance with directive 88/379/EEC.

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.

## 16. Other Information (continued)

Revision Date: 8/05/06.

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