

Safety Data Sheet

Barium Sulfate

Section 1: Identification

Product identifier

Product Name	Barium Sulfate; Artificial barite; enamel white; permanent white, Blanc Fixe™ N, Synthetic Barium Sulfate		
Product Code	BS233P		
Relevant identified uses of the substance or mixture and uses advised against			
Recommended use			
Use Restrictions:	Food and Drug related applications		
Detail of the supplier of the safety data sheet			
Manufacturer			
Supplier/ Distributor	Chemical Store Inc. 1059 Main Avenue, Clifton, NJ 07011 Tel: 1(973)405-6248 Website: ChemicalStore.com Email: info@ChemicaStore.com		
Emergency Telephone Number		+1 (973) 420 – 4972 (United States)	

Section 2: Hazards Identification

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

29 CFR 1910.1200	This product is not considered hazardous by the US OSHA Hazard Communication Standard 2024.
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Label elements

OSHA HCS 2012

Signal Word and Pictograms	
Hazard statements	
Precautionary statements	

Section 3: Composition/ Information on ingredients

Substances

Component	CAS No	Weight %
Barium sulfate	7727-43-7	> 99

Section 4: First Aid Measures

Description of first aid measures

Inhalation	Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.
Skin	In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Wash skin with soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention
Eye	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Do NOT induce vomiting. If person is drowsy or unconscious and vomiting, place on the left side with head down. Seek medical attention.

Most important symptoms and effects, both acute and delayed

	Refer to Section 11 - Toxicological Information.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.
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Section 5: Fire Fighting Measures

Suitable Extinguishing Media:	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.
Unsuitable Extinguishing Media:	No information available
Flash Point:	Not applicable
Method -	No information available
Autoignition Temperature:	No information available
Explosion Limits:	Upper No data available Lower No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available
Specific Hazards Arising from the Chemical	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
Hazardous Combustion Products:	Sulfur oxides.
Protective Equipment and Precautions for Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
NFPA	Health: 2 Flammability: 0 Instability: 0 Physical hazards: N/A

Section 6: Accidental Release Measures

Personal Precautions	Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.
Environmental Precautions	Should not be released into the environment. See Section 12 for additional Ecological Information.
Methods for Containment and Clean Up	Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Section 7: Handling and Storage

Handling	Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. None known.

Section 8: Exposure Control/ Personal Protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH	Mexico OEL (TWA)
Barium sulfate	TWA: 5 mg/m ³	(Vacated) TWA: 10 mg/m ³ (Vacated) TWA: 5 mg/m ³ TWA: 15 mg/m ³ TWA: 5 mg/m ³	REL = 10 mg/m ³ (TWA) REL = 5 mg/m ³ (TWA)	TWA: 10 mg/m ³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures

None under normal use conditions.

Personal Protective Equipment

Eye/face Protection

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 and body protection exposure.

Wear appropriate protective gloves and clothing to prevent skin

Respiratory Protection

No protective equipment is needed under normal use conditions.

Recommended Filter type:

Particle filter.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties

Appearance

Physical State Solid

Color Light yellow

Odor Odorless

Odor Threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
Melting Point/Range	1580 °C / 2876 °F		
Softening Point	No data available		
Boiling Point/Range	Not applicable		
Flash Point	Not applicable	Method - No information available	
Flammability (liquid)	Not applicable	Solid	
Flammability (solid, gas)	No information available		
Explosion Limits	No data available		
Autoignition Temperature	No data available		
Decomposition Temperature	No data available		
pH	No data available		
Viscosity	Not applicable	Solid	
Water Solubility	Insoluble		
Solubility in other solvents	No information available		
Partition Coefficient (n-octanol/water)			
Vapor Pressure	No information available		
Density / Specific Gravity	4.4 (H2O=1)		

Bulk Density	No data available
Vapor Density	Not applicable
Particle characteristics	No data available
Other Information	
Molecular Formula	BaSO ₄
Molecular Weight	233.4
Evaporation Rate	Not applicable - Solid

Section 10: Stability and Reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Avoid dust formation. Excess heat.
Incompatible Materials	None known
Hazardous Decomposition Products	Sulfur oxides
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

Section 11: Toxicological Information

Information on expected route of exposure

Inhalation	Not an expected route of exposure.
Ingestion	No known effect based on information supplied.
Eyes	Not an expected route of exposure.

Skin No known effect based on information supplied.

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Barium sulfate	LD50 = 307000 mg/kg (Rat)	-	-

Toxicologically Synergistic Products No information available

(b) **skin corrosion/irritation;** No data available

(c) **serious eye damage/irritation;** No data available

(d) **respiratory or skin sensitization;**

Respiratory No data available

Skin No data available

(e) **germ cell mutagenicity;** No data available

(f) **carcinogenicity;**

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Barium sulfate	7727-43-7	Not listed	Not listed	Not listed	Not listed	Not listed

(g) **reproductive toxicity;** No data available

(h) **STOT-single exposure;** No data available

(i) **STOT-repeated exposure;** No data available

Target Organs None known.

(j) **aspiration hazard;** Not applicable Solid

Symptoms / effects, both acute and delayed No information available.

Other Adverse Effects The toxicological properties have not been fully investigated.

Endocrine Disrupting Properties

This product does not contain any known or suspected endocrine disruptors.

Sources for section 11: PubChem (NIH), ECHA (EU REACH dossiers), NIOSH Pocket Guide, EPA IRIS, OECD SIDS, ATSDR Toxicological Profiles

Section 12: Ecological Information

Ecotoxicity**Persistence and Degradability**

Insoluble in water

Bioaccumulation/ Accumulation

No information available.

Mobility

Is not likely mobile in the environment due its low water solubility.

Section 13: Disposal Considerations

Waste treatment methods

Product waste	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
Packaging waste	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14: Transport Information

DOT

Not regulated

TDG

Not regulated

IATA

Not regulated

IMDG/IMO

Not regulated

Section 15: Regulatory Information

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Barium sulfate	7727-43-7	X	ACTIVE	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)	Not applicable
TSCA 12(b) - Notices of Export	Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Barium sulfate	7727-43-7	X	-	231-784-4	X	X	X	X	X	KE-02092

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	CAS No	Weight %	SARA 313 - Threshold Values %	SARA 313 - Reporting thresholds
Barium sulfate	7727-43-7	> 99	1.0 %	-

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Barium sulfate	X	X	X	-	-

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/ Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Barium sulfate	7727-43-7	-	Use restricted. See entry 75. (see link for restriction details)	-

REACH links

<https://echa.europa.eu/substances-restricted-under-reach>

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Barium sulfate	7727-43-7	Listed	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Barium sulfate	7727-43-7	Not applicable	Not applicable	Not applicable	Not applicable

Section 16: Other Information

Revision date: 2026-08-25

Initial preparation date: 2026-08-25

SDS version: 1.0

Supersedes: [No previous version number]

Change History

Version	Date	Description of Change
[1.0]	[2026-08-25]	Initial SDS creation
[1.1]	[YYYY-MM-DD]	[e.g., Updated hazard classification / Added toxicology data / Editorial corrections]

Abbreviations and Acronyms

Term	Meaning
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
OSHA	Occupational Safety and Health Administration

Term	Meaning
ACGIH	American Conference of Governmental Industrial Hygienists
NIOSH	National Institute for Occupational Safety and Health
TWA	Time-Weighted Average
STEL	Short-Term Exposure Limit
LC50	Lethal Concentration 50%
LD50	Lethal Dose 50%
PBT	Persistent, Bioaccumulative, Toxic
vPvB	very Persistent and very Bioaccumulative

Disclaimer

The information provided in this Safety Data Sheet is believed to be accurate and represents the best information currently available. However, no warranty, express or implied, is made regarding its accuracy, completeness, or suitability for any particular purpose. The user is responsible for determining the applicability of this information to their specific use and for compliance with all applicable laws and regulations.

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