

Safety Data Sheet

#55240555 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
Bismuth (III) sulfate	7787-68-0	O12S3Bi2	10	15 Jul 2026

SECTION 1

Identification

Product name	Bismuth (III) sulfate
CAS number	7787-68-0
Chemical formula	O12S3Bi2
Molecular weight	706.15
SMILES	[O-]S(=O)(=O)[O-].[O-]S(=O)(=O)[O-].[O-]S(=O)(=O)[O-].[Bi+3].[Bi+3]
EC / EINECS number	232-129-5
Recommended use & restrictions	Laboratory use, industrial use, professional use (for professional use only)
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification



WARNING

CODE	HAZARD STATEMENT
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
CODE	PRECAUTIONARY STATEMENT
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P302+P352	IF ON SKIN: Wash with soap and water
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing
P321	Specific treatment (see supplemental first aid instructions on this label)
P403+P233	Store in a well-ventilated place. Keep container tightly closed
P405	Store locked up
P501	Dispose of contents/container to an approved waste disposal plant
Other hazards (e.g. PBT / vPvB, not classified)	Not classified as PBT or vPvB under REACH Annex XIII

SECTION 3

Composition / information on ingredients

Purity / concentration	100%
Impurities / stabilising additives	Not applicable

SECTION 4

First-aid measures

Inhalation	Remove to fresh air, keep at rest; give oxygen/artificial respiration if needed; seek medical attention if breathing difficulties persist
Skin contact	Remove contaminated clothing (do not remove if stuck), wash immediately with plenty of water; consult doctor if irritation persists. Wash with plenty of water. Continue to rinse for at least 15 minutes and seek medical attention.
Eye contact	Rinse immediately with plenty of water, remove contact lenses if easy, continue rinsing; seek medical attention if irritation persists
Ingestion	Rinse mouth with water; do not induce vomiting; seek medical attention
Symptoms / effects & medical attention	<i>Not applicable</i>

SECTION 5

Fire-fighting measures

Suitable extinguishing media	Foam, dry powder, carbon dioxide, water spray, sand
Unsuitable extinguishing media	Heavy water stream
Special hazards	<i>Not applicable</i>
Advice for firefighters	<i>Not applicable</i>

SECTION 6

Accidental release measures

Personal precautions & PPE	Isolate from fire, avoid dust formation, eliminate ignition sources; evacuate unnecessary personnel; wear PPE (respiratory, chemically protective clothing)
Environmental precautions	Prevent entry into sewers/public waters; notify authorities if contamination occurs
Containment & clean-up methods	Sweep/shovel into containers; ventilate area; avoid spreading dust

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature	Ambient
Precautions for safe handling	Avoid dust formation; provide local exhaust/ventilation; wash hands/clothing before eating/smoking
Conditions for safe storage (incompatibilities)	Keep in original container, cool, well-ventilated, away from heat/direct sunlight; store closed; incompatible with strong oxidizers/ignition sources

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data *Not applicable*

Eye / face protection Safety glasses

Skin / hand protection Nitrile gloves Thickness: 0.11mm. Breakthrough time: 480mins.

Respiratory protection Dust mask (FFP2/FFP3)

SECTION 9

Physical & chemical properties

Density (g/mL) *Not applicable*

Flash point *Not applicable*

Acidity Neutral
DERIVED FROM: LITERATURE

Appearance / physical state Solid
DERIVED FROM: LITERATURE

Colour White
DERIVED FROM: LITERATURE

Odour Not known
DERIVED FROM: LITERATURE

Melting / freezing point 405°C
DERIVED FROM: LITERATURE

Boiling point Not specified
DERIVED FROM: LITERATURE

Solubility (water) Not specified
DERIVED FROM: LITERATURE

pH Not specified
DERIVED FROM: LITERATURE

Vapour pressure Not specified
DERIVED FROM: LITERATURE

Partition coefficient (log Pow) Not specified
DERIVED FROM: LITERATURE

Auto-ignition / decomposition temp Not specified
DERIVED FROM: LITERATURE

SECTION 10

Stability & reactivity**Chemical stability / reactivity** *Not applicable***Conditions to avoid** Excessive heat.**Incompatible materials** Strong oxidizers, ignition sources, strong acids, strong bases.**Hazardous decomposition products** *Not applicable*

SECTION 11

Toxicological information**Acute toxicity (LD50 / LC50)** LD50- Oral-2500mg/kg (Rat)**Skin corrosion / irritation** May cause respiratory/skin/eye irritation; digestive tract irritation if ingested**Eye corrosion / irritation** *Not applicable***Respiratory / skin sensitisation** Risk of sensitisation or allergic reactions among sensitive individuals.**Carcinogenicity / mutagenicity / reproductive** *Not applicable***STOT (single / repeated exposure)** May cause respiratory irritation.**Aspiration hazard** *Not applicable***Endocrine disruptors** *Not applicable*

SECTION 12

Ecological information**Aquatic toxicity** *Not applicable***Persistence & degradability** *Not applicable***Bioaccumulative potential** *Not applicable***Mobility in soil** *Not applicable***PBT / vPvB assessment** *Not applicable*

SECTION 13

Disposal considerations**Waste treatment / disposal methods** Sweep/shovel into containers for disposal. Dispose of in accordance with local/national regulations

SECTION 14

Transport information

UN number	Not applicable
Proper shipping name	Not applicable
Class	Not applicable
Packing group	Not applicable
Transport category	Not applicable
Tunnel code	Not applicable
Packing instruction (ADR)	Not applicable
Packing instruction (IMDG)	Not applicable
Environmental hazards	No data available
Special precautions for user	No data available

SECTION 15

Regulatory information

REACH code	Y110
UFI code	Not applicable
ECHA notification	Not applicable
Chemical safety assessment carried out?	Not applicable

SECTION 16

Other information

Revision notes / other information	Not applicable
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