Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company
Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,
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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers
Product Name: Barium fluoride, 99.99%
Product Code: B 6062
CAS No: 7787-32-8

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet
Company identification
OTTO CHEMIE PVT LTD
No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number
Phone no. : + 91 98200 41841 (10 : 00 am – 06 : 00 pm)

SECTION 2: Hazards identification
2.1 Classification of the substance or mixture
Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Acute toxicity, Category 4	H332: Harmful if inhaled.

2.2 Label elements
Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:
Signal word	: Warning
Hazard statements	: H302 + H332 Harmful if swallowed or if inhaled.
Precautionary statements	Prevention: P261 Avoid breathing dust. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. Response: P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Reduced Labelling (<= 125 ml)

Hazard pictograms	:
Signal word	Warning
Hazard Statements	none
Precautionary Statements	none
Supplemental Hazard Statements	none

2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Ecological information: The substance/mixture does not contain components considered to

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have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Weak hydrogen fluoride-releaser

SECTION 3: Composition/information on ingredients
3.1 Substances
EC-No. : 232-108-0
Components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)	M-Factor, SCL, ATE
barium fluoride	7787-32-8 232-108-0	>= 90 - <= 100	Acute toxicity estimate Acute oral toxicity: 500,1 mg/kg

SECTION 4: First aid measures
4.1 Description of first aid measures
General advice : Hydrofluoric (HF) acid burns require immediate and specialized first aid and medical treatment. Symptoms may be delayed up to 24 hours depending on the concentration of HF. After decontamination with water, further damage can occur due to penetration/absorption of the fluoride ion. Treatment should be directed toward binding the fluoride ion as well as the effects of exposure. Skin exposures can be treated with a 2.5% calcium gluconate gel repeated until burning ceases. More serious skin exposures may require subcutaneous calcium gluconate except for digital areas unless the physician is experienced in this technique, due to the potential for tissue injury from increased pressure. Absorption can readily occur through the subungual areas and should be considered when undergoing decontamination. Prevention of absorption of the fluoride ion in cases of ingestion can be obtained by giving milk, chewable calcium carbonate tablets or Milk of Magnesia to conscious victims. Conditions such as hypocalcemia, hypomagnesemia and cardiac arrhythmias should be monitored for, since they can occur after exposure. Show this safety data sheet to the doctor in attendance.
If inhaled : After inhalation: fresh air. If breathing stops: mouthto-mouth breathing or artificial respiration. Oxygen if necessary. Immediately call in physician.
In case of skin contact : First treatment with calcium gluconate paste.
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
In case of eye contact : After eye contact: rinse out with plenty of water. Remove contact lenses.
If swallowed : After swallowing: immediately make victim drink water (two glasses at most).
Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
4.3 Indication of any immediate medical attention and special treatment needed
No data available

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SECTION 5: Firefighting measures
5.1 Extinguishing media
Suitable extinguishing media
Use extinguishing measures that are appropriate to
local circumstances and the surrounding environment.
Unsuitable extinguishing media
For this substance/mixture no limitations of
extinguishing agents are given.
5.2 Special hazards arising from the substance or mixture
Specific hazards during
fire fighting
Not combustible.
Ambient fire may liberate hazardous vapours.
Hazardous combustion
products
Hydrogen fluoride
Barium oxide
5.3 Advice for firefighters
Special protective
equipment for firefighters
In the event of fire, wear self-contained breathing
apparatus.
Further information : Suppress (knock down) gases/vapours/mists with a water spray jet.
Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions : Advice for non-emergency personnel: Avoid inhalation of dusts.
Avoid substance contact. Ensure adequate ventilation.
Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.
6.2 Environmental precautions
Environmental
precautions
Do not let product enter drains.
6.3 Methods and material for containment and cleaning up
Methods for cleaning up : Cover drains. Collect, bind, and pump off spills.
Observe possible material restrictions (see sections 7 and 10).
Take up dry. Dispose of properly. Clean up affected
area. Avoid generation of dusts.
6.4 Reference to other sections
For disposal considerations see section 13.

SECTION 7: Handling and storage
7.1 Precautions for safe handling
Advice on safe handling : Work under hood. Do not inhale substance/mixture.
Hygiene measures : Change contaminated clothing. Preventive skin
protection recommended. Wash hands after working
with substance.
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Further information on
storage conditions
Tightly closed. Dry.
Storage class (TRGS 510) : 13, Non Combustible Solids
Recommended storage
temperature
Recommended storage temperature see product label.
7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Occupational Exposure Limits
8.2 Exposure controls
Individual protection measures, such as personal protective equipment (PPE)
Eye/face protection : Use equipment for eye protection tested and
approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Safety glasses
Hand protection
Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0,11 mm
Protective index : Full contact
Manufacturer : KCL 741 Dermatril® L
Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0,11 mm
Protective index : Splash contact
Manufacturer : KCL 741 Dermatril® L
Remarks : This recommendation applies only to the product
stated in the safety data sheet, supplied by us and
for the designated use. When dissolving in or mixing
with other substances and under conditions deviating
from those stated in EN 16523-1 please contact the
supplier of CE-approved gloves (e.g. KCL GmbH, D36124 Eichenzell, Internet: www.kcl.de).
Skin and body protection : protective clothing
Respiratory protection : required when dusts are generated.
Our recommendations on filtering respiratory
protection are based on the following standards: DIN
EN 143, DIN 14387 and other accompanying
standards relating to the used respiratory protection system.
Recommended Filter type: Filter B-(P2)
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory
protective devices are carried out according to the instructions of the producer.
These measures have to be properly documented.
Environmental exposure controls
Advice : Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: Powder or crystals
Colour	: white
Odour	: No data available
Melting point/ range	: 1.368 °C (1.013 hPa) (ECHA)
Boiling point/boiling range	: 2.260 °C
Flammability	: The product is not flammable.
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Flash point	: Not applicable
Autoignition temperature	: No data available
Decomposition temperature	: No data available
pH	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: No data available
Water solubility	: No data available
Partition coefficient: noctanol/water	: Not applicable for inorganic substances

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Vapour pressure	: No data available
Relative density	: 4,735 (20 °C) Method: Regulation (EC) No. 440/2008, Annex, A.3
Density	: 4,89 g/mL (25 °C)
Relative vapour density	: No data available
9.2 Other information	
Explosives	: Not classified as explosive.
Oxidizing properties	: none
Burning rate	: No data available
Evaporation rate	: No data available
Molecular weight	: 175,32 g/mol

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available
10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .
10.3 Possibility of hazardous reactions
Hazardous reactions : Generates dangerous gases or fumes in contact with: acids
10.4 Conditions to avoid
Conditions to avoid : Heat
no information available
10.5 Incompatible materials
No data available
10.6 Hazardous decomposition products
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:
Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L.
Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.
Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity
Components:
barium fluoride:
Toxicity to fish : Remarks: No data available
12.2 Persistence and degradability
Components:
barium fluoride:
Biodegradability : Remarks: The methods for determining the biological
degradability are not applicable to inorganic
substances.
12.3 Bioaccumulative potential
Components:
barium fluoride:
Partition coefficient: noctanol/water
: Remarks: Not applicable for inorganic substances
12.4 Mobility in soil
No data available
12.5 Results of PBT and vPvB assessment
Product:
Assessment : This substance/mixture contains no components
considered to be either persistent, bioaccumulative
and toxic (PBT), or very persistent and very
bioaccumulative (vPvB) at levels of 0.1% or higher.

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12.6 Endocrine disrupting properties
Product:
Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects
Components:
barium fluoride:
Additional ecological information
No data available

SECTION 13: Disposal considerations
13.1 Waste treatment methods
Product : Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: Transport information
14.1 UN number or ID number
ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA_P : Not regulated as a dangerous good
14.2 UN proper shipping name
ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA_P : Not regulated as a dangerous good
14.3 Transport hazard class(es)
ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA_P : Not regulated as a dangerous good
14.4 Packing group
ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good
IATA_P (Passenger) : Not regulated as a dangerous good
14.5 Environmental hazards
Not regulated as a dangerous good
14.6 Special precautions for user
Remarks : Not classified as dangerous in the meaning of transport regulations.
14.7 Maritime transport in bulk according to IMO instruments
Not applicable for product as supplied.

SECTION 15: Regulatory information
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)
Conditions of restriction for the following entries should be considered:
Number on list 75
If you intend to use this product as tattoo ink, please contact your vendor.

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REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).
Not applicable
Regulation (EU) No 2024/590 on substances that deplete the ozone layer
Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)
Not applicable
REACH - List of substances subject to authorisation (Annex XIV)
Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Not applicable
Other regulations:
Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.
Take note of Dir 94/33/EC on the protection of young people at work.
15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

SECTION 16: Other Information
This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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