## **OTTO CHEMIE PVT LTD**

## MATERIAL SAFETY DATA SHEET

1.Identification 1.1GHS Product identifier Bismuth oxide, 99% Code B 1865				
Pictogram(s) Signal word Hazard statement(s) Precautionary statement( Prevention Response Storage Disposal 2.30ther hazards which conone	ncluding precautionary statements No symbol. No signal word. none s) none none none none do not result in classification			
3.Composition/information 3.1Substances				
Chemical name Bismuth trioxide	Common names and synonyms Bismuth trioxide	CAS number 1304-76-3	EC number none	Concentration 100%
	- Contraction			
If inhaled If breathed in, move perso In case of skin contact Wash off with soap and p In case of eye contact Rinse thoroughly with ple If swallowed Never give anything by m 4.2Most important sympto no data available 4.3Indication of immediate no data available	ary first-aid measures w this safety data sheet to the doctor in attendance on into fresh air. If not breathing, give artificial res lenty of water. Consult a physician. Inty of water for at least 15 minutes and consult a routh to an unconscious person. Rinse mouth with oms/effects, acute and delayed e medical attention and special treatment needed	spiration. Consult a physician. physician. h water. Consult a physician.		
5.2Specific hazards arisin no data available 5.3Special protective action	resistant foam, dry chemical or carbon dioxide. ng from the chemical			
Use personal protective e	sures protective equipment and emergency procedures quipment. Avoid dust formation. Avoid breathing fe areas. Avoid breathing dust. For personal prot	vapours, mist or gas. Ensure adec	quate ventilation.	

6.2Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. 6.3Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7.Handling and storage

7.1Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2. 7.2Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8.Exposure controls/personal protection

8.1Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. 8.3Individual protection measures, such as personal protective equipment (PPE)

Eve/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Respiratory protection

Wear dust mask when handling large quantities.

Thermal hazards

no data available

10.1Reactivity no data available

9. Physical and chemical properties yellow powder no data available Physical state Colour Odour no data available Melting point/ freezing point 817\u00baC 1890\u00baC RELATIVE DENSITY Boiling point or initial boiling point and boiling range Flammability no data available Lower and upper explosion limit / flammability no data available limit Flash point 1890\u00b0C Auto-ignition temperature no data available no data available Decomposition temperature no data available pН Kinematic viscosity no data available Solubility In water: INSOLUBLE Partition coefficient n-octanol/water (log value) no data available Vapour pressure no data available Density and/or relative density 0.5?1.1g/mL no data available Relative vapour density Particle characteristics no data available

10.Stability and reactivity 10.2Chemical stability Stable under recommended storage conditions.

10.3Possibility of hazardous reactions no data available 10.4Conditions to avoid no data available 10.5Incompatible materials no data available

10.6Hazardous decomposition products no data available

11.Toxicological information Acute toxicity Oral: no data available Inhalation: no data available Dermal: no data available Skin corrosion/irritation no data available Serious eye damage/irritation no data available Respiratory or skin sensitization no data available Germ cell mutagenicity no data available Carcinogenicity no data available Reproductive toxicity no data available STOT-single exposure no data available STOT-repeated exposure no data available Aspiration hazard no data available 12. Ecological information 12.1Toxicity Toxicity to fish: no data available Toxicity to daphnia and other aquatic invertebrates: no data available Toxicity to algae: no data available Toxicity to microorganisms: no data available 12.2Persistence and degradability no data available 12.3Bioaccumulative potential no data available 12.4Mobility in soil no data available 12.50ther adverse effects no data available 13.Disposal considerations 13.1Disposal methods Product The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems. Contaminated packaging Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials. 14.Transport information 14.1UN Number ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. 14.2UN Proper Shipping Name ADR/RID: unknown IMDG: unknown IATA: unknown 14.3Transport hazard class(es) ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. 14.4Packing group, if applicable IATA: Not dangerous goods. ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. 14.5Environmental hazards ADR/RID: no IATA: no IMDG: no 14.6Special precautions for user no data available 14.7Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code no data available 15.Regulatory information 15.1Safety, health and environmental regulations specific for the product in question Chemical name Common names and synonyms CAS number EC number

Bismuth trioxide	Bismuth trioxide	1304-76-3	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.

United States Toxic Substances Control Act (TSCA) Inventory	
China Catalog of Hazardous chemicals 2015	Not Listed.
New Zealand Inventory of Chemicals (NZIoC)	Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Listed.
Vietnam National Chemical Inventory	Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)	Listed.

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.

