**Otto Chemie Pvt Ltd** 

An ISO 9001 : 2015 & GMP Certified Company Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

### MATERIAL SAFETY DATA SHEET (MSDS)

## SECTION 1: Product identifiers

Product Name Barium perchlorate, GR 98% Product Code B 1345 CAS No: 13465-95-7

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 Oxidizing solids, (Category 1) H271: May cause fire or explosion; strong oxidizer. Acute toxicity, (Category 4) H302: Harmful if swallowed. Acute toxicity, (Category 4) H332: Harmful if inhaled. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Danger Hazard Statements H271 May cause fire or explosion; strong oxidizer. H302 + H332 Harmful if swallowed or if inhaled. Precautionary Statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. P220 Avoid breathing dust.

P261 P264 P301 + P312

P304 + P340 + P312

Supplemental Hazard Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Hazard Statements H271 Precautionary Statements P210

P220 Supplemental Hazard Statements

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

none

unwell.

none

Danger

levels of 0.1% or higher. Ecological information:

Ecological information

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Wash skin thoroughly after handling.

May cause fire or explosion; strong oxidizer.

other ignition sources. No smoking.

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel

Keep away from heat, hot surfaces, sparks, open flames and

Keep away from clothing and other combustible materials.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

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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. 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.

### **SECTION 3: Composition/information on ingredients**

3.1 Substances Formula BaCl2O8

Formula	. DaGIZOO
Molecular weight	: 336,23 g/mol
CAS-No.	: 13465-95-7
EC-No.	: 236-710-4

Barium perchlorate Ox. Sol. 1; Acute Tox. 4; H271, H302, <= 100 %	Component	Classification	Concentration
	Barium perchlorate		
EC-No. 236-710-4 H332	CAS-No. 13465-95-7	Ox. Sol. 1; Acute Tox. 4; H271, H302,	<= 100 %
	EC-No. 236-710-4	H332	

For the full text of the H-Statements mentioned in this Section, see Section 16.

### **SECTION 4: First aid measures**

4.1 Description of first-aid measures General advice Show this material safety data sheet to the doctor in attendance. If inhaled After inhalation: fresh air. If breathing stops: mouth-to-mouth breathing or artificial respiration. Oxygen if necessary. Immediately call in physician. In case of skin contact 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 **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 Hydrogen chloride gas Barium oxide Not combustible. Vapors are heavier than air and may spread along floors. Has a fire-promoting effect due to release of oxygen. Ambient fire may liberate hazardous vapours. 5.3 Advice for firefighters In the event of fire, wear self-contained breathing apparatus. 5.4 Further information Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire

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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 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 Do not let product enter drains. 6.3 Methods and materials for containment and 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 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. Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition. 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 Storage conditions Tightly closed. Separately or together with other oxidising substances only and away from sources of ignition and heat.Because of their oxidation potential these products can raise the burning rate of combustible substances substantially or ignite combustible substances on contact with them. strongly hygroscopic Storage class Storage class (TRGS 510): 5.1A: Strongly oxidizing hazardous materials 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated **SECTION 8: Exposure controls/personal protection** 8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment 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 Skin protection 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, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Nitrile rubber Minimum laver thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L 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

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contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L 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 type 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. Control of environmental exposure Do not let product enter drains. **SECTION 9: Physical and chemical properties** 9.1 Information on basic physical and chemical properties a) Physical state powder b) Color white c) Odor No data available d) Melting Melting point/range: 505 °C - lit point/freezing point e) Initial boiling point No data available and boiling range f) Flammability (solid, No data available gas) g) Upper/lower No data available flammability or explosive limits h) Flash point 21 °C - closed cup i) Autoianition No data available temperature j) Decomposition No data available temperature No data available k) pH Viscosity, kinematic: No data available I) Viscosity Viscosity, dynamic: No data available m) Water solubility soluble n) Partition coefficient: No data available n-octanol/water o) Vapor pressure No data available 3,2 g/mL at 25 °C - lit.

p) Density Relative density g) Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing properties The substance or mixture is classified as oxidizing with the category 1. 9.2 Other safety information No data available

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No data available

No data available

No data available

No data available

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## **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 Risk of explosion with: oxidisable substances Reducing agents Alcohols combustible substances ammonium compounds Powdered metals conc. sulfuric acid perchloric acid 10.4 Conditions to avoid Heat. Avoid moisture. 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 other Toxic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available. SECTION 12: Ecological information 12.1 Toxicity No data available 12.2 Persistence and degradability

No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB 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. 12.6 Endocrine disrupting properties Product: The substance/mixture does not contain components Assessment : considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission

12.7 Other adverse effects No data available

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Regulation (EU) 2018/605 at levels of 0.1% or higher.

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### **SECTION 13: Disposal considerations**

13.1 Waste treatment methods No data available

## **SECTION 14: Transport information**

14.1 UN number		
ADR/RID: 1447	IMDG: 1447	IATA: 1447
14.2 UN proper shipping name	1	
ADR/RID:	BARIUM PERCHLORATE, SOLID	
IMDG:	BARIUM PERCHLORATE, SOLID	
IATA:	BARIUM PERCHLORATE, SOLID	
14.3 Transport hazard class(es		
ADR/RID: 5.1 (6.1)	IMDG: 5.1 (6.1)	IATA: 5.1 (6.1)
14.4 Packaging group		
ADR/RID: II	IMDG: II	IATA: II
14.5 Environmental hazards		
ADR/RID: no	IMDG Marine pollutant: no	IATA: no
14.6 Special precautions for us	ser	
Tunnel restriction code : (E)		
Further information : No data a	vailable	
SECTION 15: Regulatory info		
	nmental regulations/legislation specific	for the
substance or mixture		
This material safety data sheet 1907/2006.	complies with the requirements of Reg	gulation (EC) No.
Authorisations and/or restriction	ns on use	
National legislation		
Seveso III: Directive 2012/18/E	U of the	
European Parliament and of th	e Council	
on the control of major-acciden		
involving dangerous substance		
P8 OXIDISING LIQUIDS AND		
SOLIDS		
P8 OXIDISING LIQUIDS AND		
SOLIDS		
Other regulations		
	rding maternity protection in accordance	ce to Dir 92/85/EEC or
stricter national regulations who		
	he protection of young people at work.	
15.2 Chemical Safety Assessm		
	ety 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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