Otto Chemie Pvt Ltd

Tel : + 91 22 2207 0099 Fax : + 91 22 2207 7777 Email : info@ottokemi.com, Web www.ottokemi.com

MATERIAL SAFETY DATA SHEET

1.Identification 1.1GHS Product identifier Cesium bromide, GR 99%+ CodeC 1795

2.Hazard identification 2.1Classification of the substance or mixture Skin irritation, Category 2 Eye irritation, Category 2 Specific target organ toxicity \u2013 single exposure, Category 3 2.2GHS label elements, including precautionary statements Pictogram(s)

Signal word	Warning		
Hazard statement(s)	H315 Causes skin irritation		
	H319 Causes serious eye irritation		
_	H335 May cause respiratory irritation		
Precautionary			
statement(s)			
Prevention	P264 Wash thoroughly after handling.		
	P280 Wear protective gloves/protective clothing/eye		
	protection/face protection.		
	P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P271 Use only outdoors or in a well-ventilated area.		
Response	P302+P352 IF ON SKIN: Wash with plenty of water/		
Response	P321 Specific treatment (see on this label).		
	P32+P313 If skin irritation occurs. Get medical		
	advice/attention.		
	P362+P364 Take off contaminated clothing and wash it		
	before reuse		
	P305+P351+P338 IF IN EYES: Rinse cautiously with		
	water for several minutes. Remove contact lenses, if		
	present and easy to do. Continue rinsing.		
	P337+P313 If eye irritation persists: Get medical		
	advice/attention.		
	P304+P340 IF INHALED: Remove person to fresh air and		
	keep comfortable for breathing.		
	P312 Call a POISON CENTER/doctor/\u2026if you feel		
	unwell.		
Storage	P403+P233 Store in a well-ventilated place. Keep		
	container tightly closed.		
.	P405 Store locked up.		
Disposal	P501 Dispose of contents/container to		
2.30ther nazards which	do not result in classification		

none

3.Composition/information on ingredients

^{3.1}Substances

Chemical	Common names and	CAS	EC	Concentration	
name	synonyms	number	number		
cesium,bromide	cesium,bromide	7787-69-1	none	100%	

4.First-aid measures

4.1Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water. Consult a physician. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 4.2Most important symptoms/effects, acute and delayed no data available 4.3Indication of immediate medical attention and special treatment needed, if necessary no data available 5.Fire-fighting measures 5.1Extinguishing media Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. 5.2Specific hazards arising from the chemical no data available 5.3Special protective actions for fire-fighters Wear self-contained breathing apparatus for firefighting if necessary. 6.Accidental release measures 6.1Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8. 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. 8.3 Individual protection measures, such as personal protective equipment (PPE) Eye/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 9. Physical and chemical properties Physical state colourless crystals no data available Colour Odour no data available Melting point/ freezing 636\u00b0C(lit.) point Boiling point or initial 136\u00b0C/28mmHg(lit.) boiling point and boiling range Flammability no data available Lower and upper no data available explosion limit / flammability limit Flash point 108\u00b0C(lit.) Auto-ignition no data available

temperature Decomposition no data available temperature рΗ no data available Kinematic viscosity no data available In water:55 g/100 mL (20 \u00baC) Solubility Partition coefficient n- no data available octanol/water (log value) Vapour pressure no data available Density and/or relative 4.44g/mLat 25\u00b0C(lit.) density Relative vapour no data available densitv Particle characteristics no data available 10.Stability and reactivity 10.1Reactivity no data available 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 inform 14.1UN Number	nation						
ADR/RID: Not dangerous		IMDG: Not dangerous	IATA: Not dan	derous			
goods.	Jerous	goods.	goods.	gerous			
14.2UN Proper Shi	nning Nam	0	900u3.				
ADR/RID: unknowr							
IMDG: unknown							
IATA: unknown							
14.3Transport haza	ard class(e	s)					
ADR/RID: Not dangerous		IMDG: Not dangerous	IATA: Not dan	derous			
goods.		goods.	goods.	gorouo			
14.4Packing group,	if applicat		geedel				
ADR/RID: Not dang		IMDG: Not dangerous	IATA: Not dan	aerous			
goods.		goods.	goods.	5			
14.5Environmental	hazards	5	5				
ADR/RID: no	IATA: no						
14.6Special precau							
no data available							
14.7Transport in bu	ilk accordi	ng to Annex II of MARPOL	73/78 and the I	3C Code			
no data available							
15.Regulatory infor							
15.1Safety, health a	and enviro	nmental regulations specifi	c for the produc				
Chemical name	Common	names and synonyms	CAS number	EC number			
cesium,bromide	cesium,bi		7787-69-1	none			
European Invento (EINECS)	Listed.						
EC Inventory	Listed.						
United States Tox	Listed.						
China Catalog of I	Not Listed.						
New Zealand Inve							
				Listed.			
(PICCS)		emicals and Chemical Su	Ibstances	Listed. Not Listed.			
	ory of Ch	emicals and Chemical Su	Ibstances				

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.