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 : Chromium, pieces, 99.999% Product Code : C 2217 CAS No: 7440-47-3

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
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
2.2 Label elements
Labelling according Regulation (EC) No 1272/2008
Pictogram none
Signal word none
Hazard statement(s) none
Precautionary statement(s) none
Supplemental Hazard none
Statements
Safety data sheet available on request.
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.

SECTION 3: Composition/information on ingredients

3.1 Substances	
Formula	: Cr
Molecular weight	: 51.10 g/mol
CAS-No.	: 7440-47-3
EC-No.	: 231-157-5

Component		Classification	Concentration
Chromium			
CAS-No EC-No.	7440-47-3 231-157-5		<= 100 %

Hazardous ingredients according to Regulation (EC) No 1272/2008

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water. In case of eye contact

Flush eyes with water as a precaution. If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

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>

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 water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2 Special hazards arising from the substance or mixture
Chromium oxides
5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
5.4 Further information
No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8. 6.2 Environmental precautions

No special environmental precautions required. 6.3 Methods and materials for containment and cleaning up

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

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities

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

Storage class (TRGS 510): Non Combustible Solids

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

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice. 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).

Skin protection

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. Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous

substances, and to the specific work-place., The type of protective equipment must be selected

according to the concentration and amount of the dangerous substance at the specific workplace. Respiratory protection

Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards

such as NIOSH (US) or CEN (EU).

Control of environmental exposure

No special environmental precautions required.

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

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: info@ottokemi.com Web: www.ottokemi.com

Melting point/range: 1,857 °C - lit.

2.672 °C - lit. boiling range

granules

light grey

odourless

No data available

No data available

Not applicable

No data available

7.14 g/mL at 25 °C

No data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties a) Appearance Form Colour: b) Odour c) Odour Threshold d) pH e) Melting point/freezing point) Initial boiling point and g) Flash point h) Evaporation rate i) Flammability (solid, gas) j) Upper/lower flammability or explosive limits k) Vapour pressure I) Vapour density m) Relative density n) Water solubility o) Partition coefficient: noctanol/water p) Auto-ignition temperature q) Decomposition temperature r) Viscosity s) Explosive properties t) Oxidizing properties 9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity No data available 10.2 Chemical stability Stable under recommended storage conditions. 10.3 Possibility of hazardous reactions No data available 10.4 Conditions to avoid No data available 10.5 Incompatible materials Strong acids, Strong oxidizing agents 10.6 Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Chromium oxides Other decomposition products - No data available 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.

DISCI AIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

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>

SECTION 12: Ecological information

12.1 Toxicity		
Toxicity to fish LC50 - Cyprinus carpio (C	Carp) - 14.3 mg/l - 96 h(Chrom	nium)
Toxicity to daphnia and		
other aquatic		
EC50 - Daphnia magna (Water flea) - 0.0	07 mg/l - 48 h(Chromium)	
invertebrates		
12.2 Persistence and degradability		
No data available		
12.3 Bioaccumulative potential		
Bioaccumulation Oncorhynchus mykiss ((rainbow trout) - 30 d	
- 50 μg/l(Chromium)		
12.4 Mobility in soil		
Bioconcentration factor (BCF): 1.03 - 1.2	22	
No data available(Chromium)		
12.5 Results of PBT and vPvB assessme	ent	
This substance/mixture contains no com		
toxic (PBT), or very persistent and very b	bioaccumulative (vPvB) at leve	els of 0.1% or higher. 12.6 Other adverse effects
No data available		
SECTION 13: Disposal considerations	5	
13.1 Waste treatment methods		
Product		
Offer surplus and non-recyclable solution	ns to a licensed disposal comp	bany.
Offer surplus and non-recyclable solutior Contaminated packaging	ns to a licensed disposal comp	bany.
	ns to a licensed disposal comp	pany.
Contaminated packaging	ns to a licensed disposal comp	pany.
Contaminated packaging	ns to a licensed disposal comp	bany.
Contaminated packaging Dispose of as unused product.	ns to a licensed disposal comp	bany.
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number	IMDG: -	Dany.
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number		
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name		
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name ADR/RID: Not dange	IMDG: -	
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name ADR/RID: Not dange IMDG: Not dange	IMDG: -	
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name ADR/RID: Not dange IMDG: Not dange IATA: Not dange	IMDG: - erous goods erous goods	
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name ADR/RID: Not dange IMDG: Not dange	IMDG: - erous goods erous goods	
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name ADR/RID: Not dange IMDG: Not dange IATA: Not dange 14.3 Transport hazard class(es) ADR/RID: -	IMDG: - erous goods erous goods erous goods	JATA: -
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name ADR/RID: Not dange IMDG: Not dange IATA: Not dange 14.3 Transport hazard class(es) ADR/RID: - 14.4 Packaging group	IMDG: - erous goods erous goods erous goods	JATA: -
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name ADR/RID: Not dange IMDG: Not dange IATA: Not dange 14.3 Transport hazard class(es) ADR/RID: - 14.4 Packaging group	IMDG: - erous goods erous goods erous goods IMDG: -	IATA: -
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name ADR/RID: Not dange IMDG: Not dange IATA: Not dange 14.3 Transport hazard class(es) ADR/RID: - 14.4 Packaging group ADR/RID: -	IMDG: - erous goods erous goods erous goods IMDG: -	IATA: -
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name ADR/RID: Not dange IMDG: Not dange IMDG: Not dange IATA: Not dange 14.3 Transport hazard class(es) ADR/RID: - 14.4 Packaging group ADR/RID: - 14.5 Environmental hazards ADR/RID: no	IMDG: - erous goods erous goods erous goods IMDG: - IMDG: -	IATA: - IATA: -
Contaminated packaging Dispose of as unused product. SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name ADR/RID: Not dange IMDG: Not dange IATA: Not dange 14.3 Transport hazard class(es) ADR/RID: - 14.4 Packaging group ADR/RID: - 14.5 Environmental hazards	IMDG: - erous goods erous goods erous goods IMDG: - IMDG: -	IATA: - IATA: -

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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.

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product