An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. 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: Manganese powder, 99.8% Product Code: M 1444 CAS No : 7439-96-5

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
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208.
Email info@ottokemi.com

1.4. Emergency telephone number Phone no. : + 91 22 2207 0099 (9:00am - 6:00 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

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008. 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 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	: Mn
Molecular weight	: 54,94 g/mol
CAS-No.	: 7439-96-5
EC-No.	: 231-105-1

Component	Classification	Concentration
manganese, metallic flakes / coarsely		
powdered		
CAS-No. 7439-96-5		<= 100 %
EC-No. 231-105-1		

SECTION 4: First aid measures

4.1 Description of first-aid measures
If inhaled
After inhalation: fresh air.
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.

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If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell

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

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Manganese/manganese oxides

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

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
Advice for non-emergency personnel: Avoid inhalation of dusts. 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 For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities Storage conditions Tightly closed. Dry. Moisture sensitive. Handle and store under inert gas. Storage class
Storage class (TRGS 510): 11: 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
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).

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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 No data available 10.4 Conditions to avoid Avoid moisture. no information available 10.5 Incompatible materials acids, Halogens, Bases, Phosphorus, Sulfur oxides, Hydrogen peroxide, Oxidizing agents, Nitric acid, Sodium Hydroxide, Carbon dioxide (CO2), Nitryl Flouride, Steam 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 Toxicity to fish semi-static test NOEC - Oncorhynchus mykiss (rainbow trout) - 3,6 mg/l - 96 h (OECD Test Guideline 203) Remarks: No toxicity at the limit of solubility. Toxicity to daphnia and other aquatic invertebrates Immobilization NOEC - Daphnia magna (Water flea) - 1,6 mg/l - 48 h (OECD Test Guideline 202) Remarks: No toxicity at the limit of solubility. Toxicity to algae Growth inhibition EC50 - Desmodesmus subspicatus (green algae) -4,5 mg/l - 72 h (OECD Test Guideline 201) Toxicity to bacteria Respiration inhibition EC50 - Sludge Treatment - 1.000 mg/l - 3 h (OECD Test Guideline 209) 12.2 Persistence and degradability The methods for determining biodegradability are not applicable to inorganic substances. 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: Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission

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De Re 12.7 Other adverse effe No data available	legated regulation (EU) 2017/2100 or gulation (EU) 2018/605 at levels of 0. ects	Commission 1% or higher.	
SECTION 13: Disposa 13.1 Waste treatment n No data available	I considerations nethods		
SECTION 14: Transpo 14.1 UN number ADR/RID: - 14.2 UN proper shippin ADR/RID : N	g name ot dangerous goods	IMDG: -	IATA: -
IMDG : N IATA : N 14.3 Transport hazard o ADR/RID: - 14.4 Packaging group	ot dangerous goods ot dangerous goods class(es)	IMDG: -	IATA: -
ADR/RID: - 14.5 Environmental haz ADR/RID: no 14.6 Special precaution No data available	zards ns for user	IMDG: - IMDG Marine pollutant: no	IATA: - IATA: no
Further information Not classified as dange 14.7 Maritime transport Not applicable for produ	rous in the meaning of transport regul in bulk according to IMO instruments act as supplied.	ations.	
SECTION 15: Regulatory information 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. 15.2 Chemical Safety Assessment			
For this product a chem	nical safety assessment was not carrie	d 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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