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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : Manganese acetate, GR 99%+ Product Code: M 1457 CAS-No.: 6156-78-1

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

 Details of the supplier of the safety data sheet Company identification OTTO CHEMIE PVT LTD
 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 Specific target organ toxicity repeated exposure, (Category 2), Brain Long-term (chronic) aquatic hazard, (Category 3) 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Hazard Statements H373

H373: May cause damage to organs through prolonged or repeated exposure if inhaled. H412: Harmful to aquatic life with long lasting effects.

Warning

May cause damage to organs (Brain) through prolonged or repeated exposure if inhaled. Harmful to aquatic life with long lasting effects.

Do not breathe dust. Avoid release to the environment. Get medical advice/ attention if you feel unwell. Dispose of contents/ container to an approved waste disposal

none

Warning

Harmful to aquatic life with long lasting effects. none none

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:

DISCLAIMER

H412

P260

P273 P314

P501 plant.

Statements

Pictogram Signal Word

Statements

H412

Precautionary Statements

Supplemental Hazard

Hazard Statements

Supplemental Hazard

Precautionary Statements

Reduced Labeling (<= 125 ml)

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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.

SECTION 3: Composition/information on ingredients

3.1 Substances	
Formula	: (C2H3O2)2Mn.4H2O
Molecular weight	: 245,09 g/mol
CAS-No.	: 6156-78-1
EC-No.	: 211-334-3

Component	Classification	Concentration
Bis(acetic acid) tetrahydrate manganese		
dihydride		
CAS-No. 6156-78-1	STOT RE 2; Aquatic Chronic 3; H373,	<= 100 %
EC-No. 211-334-3	H412	

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. 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 Water Foam Carbon dioxide (CO2) Dry powder Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given. 5.2 Special hazards arising from the substance or mixture Carbon oxides Manganese/manganese oxides Combustible. Development of hazardous combustion gases or vapours possible in the event of fire. 5.3 Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. 5.4 Further information Prevent fire extinguishing water from contaminating surface water or the ground water system.

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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. 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. Dry. Recommended storage temperature see product label. 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). Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min

Body Protection protective clothing Respiratory protection required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following

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Material tested:KCL 741 Dermatril® L

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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

b) Color c) Odor d) Melting point/freezing point e) Initial boiling point and boiling range boiling point f) Flammability (solid, gas) g) Upper/lower flammability or explosive limits h) Flash point i) Autoignition temperature j) Decomposition temperature k) pH I) Viscositv

m) Water solubility n) Partition coefficient: n-octanol/water o) Vapor pressure p) Density Relative density q) Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing properties 9.2 Other safety information Bulk density

SECTION 10: Stability and reactivity

10.1 Reactivity
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature).
10.3 Possibility of hazardous reactions
Violent reactions possible with:
Strong oxidizing agents
10.4 Conditions to avoid no information available
10.5 Incompatible materials
No data available

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solid light pink No data available Melting point: 80 °C - OECD Test Guideline 102

> 300 °C - OECD Test Guideline 103 - decomposition below

No data available

No data available

Not applicable No data available

No data available

No data available Viscosity, kinematic: No data available Viscosity, dynamic: No data available ca.233 g/l at 25 °C No data available

< 1 hPa at 25 °C - OECD Test Guideline 104 1,58 g/cm3 at 25 °C - OECD Test Guideline 109 No data available No data available

No data available

No data available none

ca.700 kg/m3

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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 LC50 - Fish - 3.230 mg/l - 96 h Remarks: Read-across (Analogy) Toxicity to daphnia and other aquatic invertebrates LC50 - Daphnia magna (Water flea) - 220,5 mg/l - 96 h Remarks: Read-across (Analogy) Toxicity to algae static test NOEC - Desmodesmus subspicatus (green algae) - 1 mg/l - 72 h (OECD Test Guideline 201) Remarks: The value is given in analogy to the following substances: Manganese Sulfate Monohydrate static test ErC50 - Desmodesmus subspicatus (green algae) - 61 ma/l - 72 h (OECD Test Guideline 201) Remarks: The value is given in analogy to the following substances: Manganese Sulfate Monohydrate 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: Assessment : 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. 12.7 Other adverse effects Ecotoxicity effects We have no quantitative data concerning the ecological effects of this product. Further information on ecology No ecological problems are to be expected when the product is handled and used with due care and attention.

SECTION 13: Disposal considerations

10.6 Hazardous decomposition products

13.1 Waste treatment methods Product

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

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	SECTION 14: Transport information						
	14 1 UN number	sport mornation					
			MDG				
	ADR/RID: -		IMDG: -	IATA: -			
	14.2 UN proper ship						
		: Not dangerous goods					
		: Not dangerous goods					
		: Not dangerous goods					
	14.3 Transport haza	rd class(es)					
	ADR/RID: -		IMDG: -	IATA: -			
	14.4 Packaging grou	qu					
	ADR/RID: -		IMDG: -	IATA: -			
14.5 Environmental hazards							
	ADR/RID: no		IMDG Marine pollutant: no	IATA: no			
14.6 Special precautions for user							
	No data available						
Further information							
Not classified as dangerous in the meaning of transport regulations.							
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.						
	Other regulations						
	Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or						
stricter national regulations where applicable.							
Take note of Dir 94/33/EC on the protection of young people at work.							
15.2 Chemical Safety Assessment							
For this product a chemical safety assessment was not carried out							
r or this product a chormour safety assessment was not carried out							
	Section 16: Other Information						
	Section 10: Other I	mormanon					

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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