MANGANESE CARBONATE

Safety Data Sheet 19

according to Regulation (EC) No 1907/2006, annex II as amended by Regulation (EC) 453/2010

Date of issue: 20/02/2017 Revision date:

SECTION 1: Identification of the substance/mixture and of the company/undertaking.

1.1. Product identifier

Product form: Substance

Product name: Manganese Carbonate

EC no: 209-942-9 CAS No.: 598-62-9

REACH registration No.: 01-2119442695-32-XXXX Synonyms: Manganese (II) Carbonate, Rhodocrosite

1.2. Relevant identified uses of the substance or mixture and uses advised against 1.2.1. Relevant identified uses

Use of the substance/preparation:

Substance used as such, in formulation or in formulation of products such as:

- Ceramics
- Fertilisers
- Surface metal treatment
- Metal working fluids
- Water Treatment
- Washing and Cleaning Products

1.2.2. Uses advised against

None

Full text of use descriptors: see section 16.

1.3. Details of the supplier of the safety data sheet

Simba Materials Limited t/a CTM Potters Supplies

Unit 7-8 Unit 10 A

Broomhouse Lane Industrial Estate Millpark Industrial Estate

Broomhouse Lane White Cross Road Woodbury Salterton

Edlington woodbur nr Exeter Doncaster Devon

Devon DN12 1EQ EX5 1EL

T +44 (0)1709 770801 - F +44 (0)1709 770803 T +44 (0)1395 233077 - F +44 (0)1395 233905

1.4. Emergency telephone number

T +44 (0)1630 673611 (Office hours only)

enquiries@industrialmineralservices.com

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SECTION 2: Hazards identification.

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Physical and chemical hazards: Not classified

Human health: Not classified Environment: Not classified

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

EC No. 209-942-9

Labelling according to Regulation (EC) No. 1272/2008 (CLP)

No pictogram required.

2.3. Other hazards

High concentrations of dust may form explosive mixture in air. Take precautionary measures against static discharges when there is a risk of dust explosion/

SECTION 3: Composition/information on ingredients.	SECTION 3: Com	position/in	formation on	ingredients.
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Name	Product identifier	%	Classification according to Directive 67/548/EEC
Manganese Carbonate	(CAS No.) 598-62-9 (EC no) 209-942-9	80 - 100	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 (CLP)
Manganese Carbonate	(CAS No.) 598-62-9 (EC no) 209-942-9	8 - 1000	Not classified

Full text of R-, H- and EUH-phrases: see section 16

REACH Registration number: 01-2119442695-32

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SECTION 4: First aid measures.

4.1. Description of first aid measures

Inhalation: Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion: Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Skin contact: Wash skin with soap and water. Get medical attention if irritation persists after washing. **Eye contact:** Make sure to remove any contact lenses from the eyes before rising. Rinse eye with water immediately. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation: No specific symptoms noted.Ingestion: No specific symptoms noted.Skin contact: No specific symptoms noted.Eye contact: No specific symptoms noted.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures.

5.1. Extinguishing media

Suitable extinguishing media: Water Spray, Alcohol-resistant foam, dry chemical or carbon dioxide **Unsuitable extinguishing media:** None

5.2. Special hazards arising from the substance or mixture

Fire hazard: Not flammable.

Explosion hazard: No explosive properties known.

Reactivity: Stable under normal conditions of handling and storage.

5.3. Advice for firefighters

Protection during firefighting: No specific fire fighting procedures given. Wear self contained breathing apparatus if necessary.

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SECTION 6: Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Keep public away from danger area. See section 8.2.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and soil. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Sweep or shovel spills into appropriate container for disposal. Avoid dust production.

6.4. Reference to other sections

See section 8 and 13 for more information.

SECTION 7: Handling and storage.

7.1. Precautions for safe handling

Precautions for safe handling: Do not breathe dust. Wash hands plentifully and other exposed areas with water after handling. Remove contaminated clothing and shoes. Wash clothing before re-using.

Packagings: Even those that have been emptied, will retain product residue. Always obey safety warnings and handle empty packagings as if they were full. Avoid all contact with this substance.

Hygiene measures: When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Remove contaminated clothing and shoes.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in dry, cool, well-ventilated area. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

The identified uses for this product are detailed in section 1.2

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SECTION 8: Exposure controls/personal protection.

8.1. Control parameters

Long-term exposure limit (8-hour TWA): WEL 0.5 mg/m³ as Mn WEL = Workplace Exposure Limit

DNEL

Workers - Inhalation; Long term systemic effects: 0.2 mg/m³
Workers - Dermal; Long term systemic effects: 0.00414 mg/kg/day
General population - Inhalation; Long term systemic effects: 0.043 mg/m³
General population - Dermal; Long term systemic effects: 0.0021 mg/kg/day

PNEC

Fresh water; 0.0084 mg/l Marine water; 0.00084 mg/l Intermittent release; 0.011 mg/l

STP; 100 mg/l

Sediment (Freshwater); 8.18 mg/kg sediment dw Sediment (Marinewater); 0.81 mg/kg sediment dw

Soil; 8.15 mg/kg soil dw

8.2. Exposure controls

Appropriate engineering controls: Use as far as possible in a closed system. Provide a regular control of the atmosphere. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Local exhaust and general ventilation must be adequate to meet exposure standards. Please refer to the annex (exposure scenarios).

Hand protection: Use gloves resistant to chemical products corresponding to EN 374:3. Take advice to gloves' manufacturer.

Eye protection: Wear safety glasses with side shields according EN 166.

Skin and body protection: The EU SCOEL issued a proposed OEL for Manganese of 0.2 mg/Mn/m³ inhalable and 0.05 mg Mn/m³ respirable. For good industrial hygiene purposes, ensure containment of gaseous/dusty material. Use local exhaust ventilation (LEV) and respiratory protective equipment (RPE) for all processes especially those resulting in dust generation. Workers are encouraged to use personal protection equipment such as eye/face protection (safety glasses, goggles etc.); Skin protection (gloves, over rolls) and respiratory protection on extremely dusty areas/ tasks.

Respiratory protection: Use respiratory protection mask according to EN 140 or EN 405 with filter type P3 according to EN 143:2000 or FFP3 according to EN 149:2001.

Environmental exposure controls: Avoid release to the environment.

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SECTION 9: Physical and chemical; properties.

Physical state

Colour Odour

Odour threshold

рН

Relative evaporation rate (butylacetate=1)

Melting point Freezing point

Initail Boiling point and range

Flash point

Self ignition temperature
Decomposition temperature
Flammability (solid, gas)

Vapour pressure

Relative vapour density at 20 °C

Relative density

Density Solubilit)

Log Kow

Viscosity, kinematic Viscosity, dynamic Explosive properties

Oxidising properties

Explosive limits

Powder.
Light brown.
odourless.
Not applicable
No data available
No data available

>446°C

No data available

Endpoint waived according to REACH Annex VII, IX or XI.

Unjustified as the melting point >300°C.

Not flammable Not applicable No dats available Not flammable

Endpoint waived according to REACH Annex VII, IX or XI.

Unjustified as the melting point >300°C.

No data available 3.27 @ 22°C +/- 0.5°C No data available

3.63mg/l at 20°C @ °C Insoluble in water.

Not applicable Not applicable Not applicable Not explosive.

Non oxidizing material according to EC criteria.

Not applicable

9.2. Other information

Mol. Weight

114.95

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SECTION 10: Stability and reactivity.

10.1. Reactivity

Discolouring may occur when the product is exposed to air.

10.2. Chemical stability

Stable under normal conditions of handling and storage.

10.3. Possibility of hazardous reactions

Fine particles may form explosive vapour/air mixtures.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. Avoid exposure to high temperatures or direct sunlight. High concentrations of dust may form explosive mixture with air.

10.5. Incompatible materials

Avoid contact with strong acids, Organic peroxides/hydroperoxides, inorganic peroxides, organic sulphur compounds, and inorganic sulphides.

10.6. Hazardous decomposition products

Carbon dioxide.

SECTION 11: Toxicological information.

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD_{50}) LD_{50} > 2000 mg/kg, Oral, Rat (OECD 420) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Scientifically unjustified

Acute toxicity - inhalation

Notes (inhalation LC_{50}) LC_{50} (4h) > 5.35 mg/l, Inhalation, Rat (OECD 403.) Read-across approach: Manganese (II) oxide. Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Primary dermal irritation index: 0 Not irritating. (OECD 404.) Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. (OECD 405.) Based on available data the classification criteria are not met.

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Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. (OECD 429.) Read-across approach: Manganese (II) oxide. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro: Bacterial reverse mutation test: Negative. (OECD 471.) Read-across approach: Manganese chloride. Based on available data the classification criteria are not met.

Genotoxicity - in vivo: Chromosome aberration: Negative. (OECD 474.) Read-across approach: Manganese chloride. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met. Weight of evidence.

Reproductive toxicity

Reproductive toxicity – fertility: Scientifically unjustified.

Reproductive toxicity –deveopment: Scientifically unjustified.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure: Based on available data the classification criteria are not met. Weight of evidence

Aspiration hazard

Aspiration hazard: Not relevant.

Inhalation: Dust in high concentrations may irritate the respiratory system.

Ingestion: May cause discomfort if swallowed.

Skin contact: Powder may irritate skin.

Eye contact: Particles in the eyes may cause irritation and smarting.

SECTION 12: Ecocological information.

Ecotoxicity: Not regarded as dangerous for the environment.

12.1. Toxicity

<u>Acute toxicity - fish</u> LC_{50} , 96 hour: > 100 % v/v, Onchorhynchus mykiss (Rainbow trout) OECD 203.

Read-across approach: Manganese (II) oxide. Based on available data the classification criteria are not met.

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hour: > 3.6 mg/l, Daphnia magna OECD 202.

Based on available data the classification criteria are not met.

Acute toxicity - aquatic plants

EC₅₀, 72 hour: > 100 % v/v, Desmodesmus subspicatus OECD 201.

Read-across approach: Manganese (II) oxide. Based on available data the classification criteria are not met.

Acute toxicity -microorganisms

NOEC, 3 hour: 1000 mg/l, Activated sludge OECD 209.

Read-across approach: Manganese (II) oxide. Based on available data the classification criteria are not met.

Chronic toxicity – aquatic invertebrates

NOEC, 8 day: 1.3 mg/l, Ceriodaphnia dubia_OECD_211.

Read-across approach: Manganese (II) oxide. Based on available data the classification criteria are not met.

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12.2. Persistence and degradability

The product contains only inorganic substances which are not biodegradable.

12.3. Bioaccumulative potential

The product is not bioaccumulating.

12.4. Mobility in soil

Not relevant, due to the form of the product.

12.5. Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT or vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations.

13.1. Waste treatment methods

Waste treatment methods: Dispose of this material and residues in accordance with local authority requirements.

Additional information: Empty packaging can have residues or dusts and are subject to proper waste disposal, as above.

Ecology - waste materials: See the European waste catalogue.

SECTION 14: Transport information.

14.1. UN number

The product is not covered by international regulation on transport of dangerous goods (IMDG, IATA, ADR/RID).

14.2. UN proper shipping name

Not classified for transportation.

14.3. Transport hazard class(es)

Not classified for transportation.

14.4. Packing group

Not classified for transportation.

14.5. Environmental hazards

Other information: Not environmental hazards known with this product.

14.6. Special precautions for user

Not classified for transportation.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

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SECTION 15: Regulatory information.

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

EU legislation:

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Guidance:

Workplace Exposure Limits EH40.

15.2. Chemical Safety Assessment.

Not classified. No chemical safety assessment has been carried out.

SECTION 16: Other information.

Abbreviations and acronyms:

ADN: European Agreement concerning international carriage of Dangerous goods by Inland waterways

ADR: European Agreement concerning international carriage of Dangerous goods by Road

AF: Assessment factor

BCF: Bioconcentration factor

Bw: Body weight

CAS: Chemical Abstracts Service

CLP: Classification, labelling, packaging

CSR: Chemical Safety Report

DMEL: Derived maximum effect level DNEL: Derivative No effect Level

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EC: European Community ELV: Emission limit values EN: European Norm

EUH: European Hazard Statement EWC: European Waste catalogue

IATA: International Air Transport Association ICAO: International Civil Aviation Organization IMDG: International Maritime Dangerous Goods

LC50: Median lethal concentration

LD50: Median lethal dose

NOAEL: No-observed-adverse-effect-level NOEC: No observed effect concentration

NOEL: No observed effect level OEL: Operator exposure level

PBT: Persistent, bioaccumulative, Toxic

PEC: Predicted effect level

PNEC: Predicted No effect Concentration

REACH: Registration, evaluation and autorisation of chemicals

RID: Regulations concerning the international carriage of dangerous goods by rail

STEL: Short Term Exposure Limit TWA: Time weighted average

vPvB: Very persistent, very bioaccumulative.

Training advice: None.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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