

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

1.1. Product identifier

Product form : Substance
 Substance name : manganese oxide
 EC no : 215-695-8
 CAS No. : 1344-43-0
 REACH registration No. : 01-2119446291-44-0001
 Formula : MnO

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

1.2.1. Relevant identified uses

Main use category : Industrial use
 Use of the substance/preparation : Welding Industry, Formulation, Metal treatment, Adhesive siccative, paint, ink & vanish, Nutritional Additive (E5)

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer :

Erachem Comilog Inc
 610 Pittman Road
 Baltimore, Maryland 21226-1792
 +1 (410) 789-8800
 cs@erametgroup.com

Only representative :

Erachem Comilog SPRL
 Rue du bois
 B-7334 Villerot (Saint-Ghislain)
 Belgique
 reach.ecsa@erametgroup.com
 +32 65 764 670 / +32 65 764 519

1.4. Emergency telephone number

Emergency telephone : EU : 112
 YellowTox: <http://www.who.int/ipcs/poisons/centre/directory/euro/en/>

Country	Official advisory body	Address	Emergency number
UNITED KINGDOM	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0870 600 6266 (UK only),
UNITED KINGDOM	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0870 600 6266 (UK only)
UNITED KINGDOM	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0870 600 6266 (UK only)
UNITED KINGDOM	NPIS Edinburgh (Scottish Poisons Information Bureau) Royal Infirmary of Edinburgh	51 Little France Crescent EH16 4SA Edinburgh	0870 600 6266 (UK only)
UNITED KINGDOM	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241
UNITED KINGDOM	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0870 600 6266 (UK only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

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

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

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

No labelling applicable

2.3. Other hazards

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

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC ----- Classification according to Regulation (EC) No. 1272/2008 [CLP]
manganese oxide	(CAS No.) 1344-43-0 (EC no) 215-695-8	> 80	Not classified ----- Not classified

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person.
First-aid measures after inhalation	: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing When symptoms occur: go into open air and ventilate suspected area. Medical examination necessary even merely on suspicion of intoxication.
First-aid measures after skin contact	: After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.
First-aid measures after eye contact	: In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
First-aid measures after ingestion	: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. If swallowed, rinse mouth with water (only if the person is conscious).

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

No additional information available

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

In case of doubt or persistent symptoms, consult always a physician.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: May release hazardous fumes. (CO, CO2)
Explosion hazard	: not explosive.
Reactivity	: The product is stable at normal handling- and storage conditions.

5.3. Advice for firefighters

Protection during firefighting : In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Prevent unauthorised access. See protective measures under point 7 and 8.

6.1.1. For non-emergency personnel

Protective equipment : Use personal protective equipment as required.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

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- Methods for cleaning up : Shovel into container for disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.
- Other information : Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Treat the recovered material as prescribed in the section on waste disposal. See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Provide adequate ventilation. Avoid generation of dust.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Minimize generation of dust. Keep container tightly closed and in a well-ventilated place.
- Storage conditions : Store in original container.
- Incompatible products : Acid. Oxidising.
- Storage area : Use only in well-ventilated areas.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

manganese oxide (1344-43-0)	
PNEC (Water)	
PNEC aqua (freshwater)	0,0084 mg/l
PNEC aqua (marine water)	0,00084 mg/l
PNEC aqua (intermittent, freshwater)	0,011 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	8,18 mg/kg dwt
PNEC sediment (marine water)	0,82 mg/kg dwt
PNEC (Soil)	
PNEC soil	8,15 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

8.2. Exposure controls

- Personal protective equipment : Gloves. Safety glasses. Protective clothing. Dust formation: dust mask.



- Hand protection : Wear suitable gloves.
- Eye protection : Dust protection eye glasses.
- Skin and body protection : Wear suitable protective clothing and gloves.
- Respiratory protection : Dust/aerosol mask with filter type P3. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Appearance : Powder.
- Colour : green. brown.
- Odour : odourless.
- Odour threshold : Not applicable
- pH : Not applicable
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Flammability (solid, gas) : No data available
- Explosive limits : Not explosive
- Vapour pressure : No data available

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Relative vapour density at 20 °C	: No data available
Relative density	: 5,28
Solubility	: Water: 0,85 g/l
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: not explosive.
Oxidising properties	: Not oxidizing.

9.2. Other information

General information : -

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling- and storage conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

Avoid generation of dust.

10.5. Incompatible materials

Acidic. Oxidising.

10.6. Hazardous decomposition products

Under fire conditions, hazardous fumes will be present.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

manganese oxide (1344-43-0)	
LC50 other aquatic organisms 1	> 100 % v/v
EC50 Daphnia 1	> 100 % v/v
NOEC (chronic)	1,3 mg/l dissolved based on mortality

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

manganese oxide (1344-43-0)	
This substance/mixture does not meet the PBT criteria of REACH, annex XIII.	
This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.	

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12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Ecology - waste materials : Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Dispose according to legislation.

SECTION 14: Transport information

No dangerous good in sense of transport regulations.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

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

Not applicable

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

SECTION 16: Other information

Abbreviations and acronyms : ACGIH American Conference of Governmental Industrial Hygienists
CAS Chemical Abstract Service
EINECS European Inventory of Existing Commercial Chemical Substances
DNEL Derived No Effect Level
LC50 Lethal Concentration 50
PBT Persistent, Bioaccumulative and Toxic
PNEC Predicted No Effect Concentration
REACH Registration, Evaluation, Autorisation of CHemicals
STP Sewage Treatment Plant
vPvB very Persistent and very Bioaccumulative.

Other information : The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this sheet is not necessarily valid for the new made-up material.

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.