

Revision Date 03-May-2012

Revision Number 2

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description:

Manganese(II) perchlorate hexahydrate

Cat No.

316510000; 316511000

Synonyms

Perchloric acid, manganese(2+) salt, hexahydrate.

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

Recommended Use

Laboratory chemicals

Uses advised against

No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

E-mail address

begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300

CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Oxidizing solids.

Category 2

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

Symbol(s)

O - Oxidizing

R-phrases(s)

R 8 - Contact with combustible material may cause fire

Label Elements

Manganese(II) perchlorate hexahydrate

Revision Date 03-May-2012

SECTION 2. HAZARDS IDENTIFICATION



Signal Word

Danger

Hazard Statements

H272 - May intensify fire; oxidizer

Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Manganese(II) Perchlorate Hexahydrate 15364-94-0		99	15364-94-0	O; R8;	Ox. Sol. 2 (H272)	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4. FIRST AID MEASURES

Description of first aid measures

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

Ingestion

Clean mouth with water. Get medical attention.

Inhalation

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.



Manganese(II) perchlorate hexahydrate

Revision Date 03-May-2012

Notes to Physician

Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Burning produces obnoxious and toxic fumes.

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Do not store near combustible materials.

Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Manganese(II) perchlorate hexahydrate

Revision Date 03-May-2012

Exposure limits

Component

Manganese(II)
Perchlorate
Hexahydrate

European Union	The United Kingdom	France	Belgium	Spain
	STEL: 1.5 mg/m ³ 15 min TWA: 0.5 mg/m ³ 8 hr			VLA-ED: 0.2 mg/m ³ 8 horas

Component

Manganese(II)
Perchlorate
Hexahydrate

Italy	Germany	Portugal	The Netherlands	Finland
	MAK: 0.2 mg/m ³ 8 Stunden. inhalable fraction MAK: 0.02 mg/m ³ 8 Stunden. respirable fraction Peak: 1.6 mg/m ³ Peak: 0.16 mg/m ³ TWA: 0.5 mg/m ³ 8 Stunden. inhalable fraction	TWA: 0.2 mg/m ³ 8 horas		

Component

Manganese(II)
Perchlorate
Hexahydrate

Austria	Denmark	Switzerland	Poland	Norway
STEL: 2 mg/m ³ 15 Minuten TWA: 0.5 mg/m ³ 8 Stunden		MAK: 0.5 mg/m ³ 8 Stunden		TWA: 1 mg/m ³ 8 timer TWA: 0.1 mg/m ³ 8 timer

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Eye Protection

Goggles

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Solid

Manganese(II) perchlorate hexahydrate

Revision Date 03-May-2012

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light red
pH	No information available.
Boiling Point/Range	No information available.
Melting Point/Range	165°C / 329°F
Flash Point	No information available.
Autoignition Temperature	No information available.
Water Solubility	soluble
Molecular Formula	Cl ₂ Mn O ₈ . 6 H ₂ O
Molecular Weight	361.93

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Stable. Hygroscopic.

Possibility of Hazardous Reactions

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	No information available.

Conditions to Avoid

Incompatible products, Exposure to moist air or water, Combustible material.

Incompatible Materials

Strong acids, Reducing agents, Powdered metals.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors. oxygen.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Manganese(II) perchlorate hexahydrate

Revision Date 03-May-2012

SECTION 11. TOXICOLOGICAL INFORMATION

Sensitization	No information available.
Mutagenic Effects	No information available
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target Organs	No information available.
Endocrine Disruptor Information	None known

SECTION 12. ECOLOGICAL INFORMATION**Toxicity**

Ecotoxicity effects	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants
----------------------------	--

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment**Other adverse effects**

No information available

SECTION 13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Waste from Residues / Unused Products	Dispose of in accordance with local regulations
Contaminated Packaging	Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION**IMDG/IMO**

Manganese(II) perchlorate hexahydrate

Revision Date 03-May-2012

SECTION 14. TRANSPORT INFORMATION

UN-No	1481
Hazard Class	5.1
Packing Group	II
Proper Shipping Name	PERCHLORATES, INORGANIC, N.O.S.

ADR

UN-No	1481
Hazard Class	5.1
Packing Group	II
Proper Shipping Name	PERCHLORATES, INORGANIC, N.O.S.

IATA

UN-No	1481
Hazard Class	5.1
Packing Group	II
Proper Shipping Name	PERCHLORATES, INORGANIC, N.O.S.

SECTION 15. REGULATORY INFORMATION

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

International Inventories

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
CHINA - China Inventory of Existing Chemical Substances
AICS - Inventory of Chemical Substances
KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

SECTION 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R 8 - Contact with combustible material may cause fire

Manganese(II) perchlorate hexahydrate

Revision Date 03-May-2012

SECTION 16. OTHER INFORMATION

Revision Date 03-May-2012

Revision Summary

Reason for revision Not applicable

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

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet