

Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

Manganese Sulfate Monohydrate, Granular (31.5% Mn)

Version number: 1.0

SECTION 1: Identification

1.1 Product identifier

Identification of the substance manganese sulphate monohydrate

Trade name <u>Manganese Sulfate Monohydrate, Granular</u>

(31.5% Mn)

CAS number 10034-96-5

Alternative number(s) 7785-87-7

(anhydrous)

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

Relevant identified uses Production of fertilizer

1.3 Details of the supplier of the safety data sheet

Valudor Products, LLC

Telephone: +1 (760) 635 8500

179 Calle Magdalena Suite 100

e-mail: info@valudor.com

Encinitas, California CA 92024

Website: www.valudor.com

United States

1.4 Emergency telephone number

Emergency information 800-535-5053 (Infotrac)

As above or nearest toxicological information centre.

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Classification								
Section	Hazard class	Category	Hazard class and category	Hazard state- ment				
A.9	specific target organ toxicity - repeated ex- posure	2	STOT RE 2	H373				

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure.

United States: en Page: 1 / 17

Version number: 1.0

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Signal word warning

Pictograms

GHS08



Hazard statements

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P260 Do not breathe dust.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container to an authorized waste treatment facility.

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance manganese sulphate monohydrate

Identifiers

CAS No 10034-96-5

Molecular formula Mn O4 S . H2 O

Molar mass 169 g/_{mol}

Purity >95 %

SECTION 4: First-aid measures

4.1 Description of first-aid measures

United States: en Page: 2 / 17

Version number: 1.0

General notes

Take off immediately all contaminated clothing.

Remove victim out of the danger area.

Do not leave affected person unattended.

Self-protection of the first aider.

Following inhalation

Provide fresh air.

Mouth to mouth resuscitation should be avoided. Use alternative methods, preferably with oxygen or compressed air driven apparatus.

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following skin contact

Take off immediately all contaminated clothing.

After contact with skin, wash immediately with plenty of water.

Wash contaminated clothing before reuse.

Following eye contact

Irrigate copiously with clean, fresh water, holding the eyelids apart.

Remove contact lenses, if present and easy to do. Continue rinsing.

Call a physician immediately.

Following ingestion

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting.

Call a physician immediately.

Notes for the doctor

None.

4.2 Most important symptoms and effects, both acute and delayed

nausea, gastrointestinal complaints, Vomiting.

Cough, pain, choking, and breathing difficulties.

Impaired memory function.

4.3 Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

non-combustible, coordinate firefighting measures to the fire surroundings

Unsuitable extinguishing media

none

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

United States: en Page: 3 / 17

Version number: 1.0

Hazardous combustion products

sulfur dioxide (SO2), metal oxide smoke, toxic

5.3 Advice for firefighters

Non-combustible.

Keep containers cool with water spray.

In case of fire and/or explosion do not breathe fumes.

Coordinate firefighting measures to the fire surroundings.

Do not allow firefighting water to enter drains or water courses.

Collect contaminated firefighting water separately.

Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Wear self-contained breathing apparatus

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

Ventilate affected area.

Control of dust.

Do not breathe dust.

Avoid contact with skin and eyes.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Knock down dust with water spray.

Keep away from drains, surface and ground water.

Retain contaminated washing water and dispose of it.

If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Take up mechanically.

Advice on how to clean up a spill

Take up mechanically.

Collect spillage.

Other information relating to spills and releases

Place in appropriate containers for disposal.

Ventilate affected area.

United States: en Page: 4 / 17

Version number: 1.0

6.4 Reference to other sections

Hazardous combustion products: see section 5.

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes.

Do not breathe dust.

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.

Removal of dust deposits.

Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room.

Measures to protect the environment

Avoid release to the environment.

Advice on general occupational hygiene

Do not eat, drink and smoke in work areas.

Wash hands after use.

Preventive skin protection (barrier creams/ointments) is recommended.

Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Flammability hazards

None.

Incompatible substances or mixtures

Incompatible materials: see section 10.

Protect against external exposure, such as

heat, humidity

Consideration of other advice

Keep away from food, drink and animal feedingstuffs.

Hygroscopic solid.

Keep away from food, drink and animal feedingstuffs.

Ventilation requirements

Provision of sufficient ventilation.

Specific designs for storage rooms or vessels

Store in a well-ventilated place. Keep cool.

Store in a dry place. Store in a closed container.

United States: en Page: 5 / 17

Version number: 1.0

Packaging compatibilities

Only packagings which are approved (e.g. acc. to DOT) may be used.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

The following constituents are the only constituents of the product which have a PEL, a TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Occup	Occupational exposure limit values (Workplace Exposure Limits)										
Coun try	Name of agent	CAS No	Iden- tifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Nota- tion	Source		
US	Particulates not otherwise regu- lated	-	PEL (CA)	-	10	-	-	dust	Cal/OSHA PEL		
US	Particulates not otherwise regu- lated	-	PEL (CA)	-	5	-	-	r	Cal/OSHA PEL		
US	particulates not otherwise classi- fied (PNOC)	-	PEL	-	15	-	-	dust	29 CFR 1910.1000		
US	particulates not otherwise classi- fied (PNOC)	-	PEL	1,765	-	-	-	partml, dust	29 CFR 1910.1000		
US	particulates not otherwise classi- fied (PNOC)	-	PEL	529.5	-	-	-	partml, r, dust	29 CFR 1910.1000		
US	particulates not otherwise classi- fied (PNOC)	-	PEL	-	5	-	-	r	29 CFR 1910.1000		
US	particulate not otherwise regu- lated	-	REL	-	-	-	-	appx-D	NIOSH RE		

Notation

appx-D see Appendix D - Substances with No Established RELs

dust as dustpartml particles/mlr respirable fraction

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-

minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of

United States: en Page: 6 / 17

Version number: 1.0

Notation

8 hours time-weighted average (unless otherwise specified

8.2 Exposure controls

Appropriate engineering controls

Use local and general ventilation.

Individual protection measures (personal protective equipment)

Wear suitable protective clothing.

Eye/face protection

Wear eye/face protection.

Hand protection

Protective gloves							
Material	Material thickness	Breakthrough times of the glove material					
NBR: acrylonitrile-butadiene rubber	≥ 0,35 mm	>480 minutes (permeation: level 6)					
IIR: isobutene-isoprene (butyl) rubber	≥ 0,5 mm	>480 minutes (permeation: level 6)					
PVC: polyvinyl chloride	≥ 0,5 mm	>480 minutes (permeation: level 6)					

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Body protection

Protective clothing for use against solid particulates.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Particulate filter device (EN 143).

P2 (filters at least 94 % of airborne particles, color code: White).

Environmental exposure controls

Use appropriate container to avoid environmental contamination.

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state solid (powder)

United States: en Page: 7 / 17

Version number: 1.0

Color whitish - light pink

Odor odorless

Odor threshold not determined

Other safety parameters

pH (value) 3-4 (in aqueous solution: $50 \, {}^{9}/_{l}$, $20 \, {}^{\circ}$ C)

Melting point/freezing point >700 °C

Boiling point or initial boiling point and boiling not determined

range

Flash point not applicable

Evaporation rate not determined

Flammability (solid, gas) non-combustible

Explosive limits

not determined

Explosion limits of dust clouds not determined

Vapor pressure not determined

Density and/or relative density

Density 3.7 g/_{cm³} at 20 °C

Relative vapour density not relevant (solid)

Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

n-octanol/water (log KOW) not relevant

(inorganic)

Auto-ignition temperature not determined

Decomposition temperature 400 °C

Viscosity not relevant

(solid)

hazard classes acc. to GHS (physical hazards):

Explosive properties none

Oxidizing properties none

Information for relevant hazard classes

according to GHS not relevant

9.2 Other information there is no additional information

United States: en Page: 8 / 17

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Protect from moisture. Hygroscopic solid.

10.5 Incompatible materials

acids, strong oxidizer, peroxides, metals

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

Sulfur oxides (SOx).

Manganoxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

If not otherwise specified the classification is based on:

Animal studies; Evidence from any other toxicity tests; Expert judgment (weight of evidence determination).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic (oral).

Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	2,150 ^{mg} / _{kg}	rat	-	ECHA

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitization

Skin sensitization

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

United States: en Page: 9 / 17

Respiratory sensitization

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

IARC Monographs

not listed

National Toxicology Program (United States)

not listed

OSHA Carcinogens

Not listed.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Other information

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

Based on available data, the classification criteria are not met.

Endpoint	Exposure time	Value	Species	Method	Source
ErC50	72 h	61 ^{mg} / _l	algae (Scenedesmus subspicatus)	OECD Guideline 201	ECHA

Aquatic toxicity (chronic)

Based on available data, the classification criteria are not met.

Endpoint	Exposure time	Value	Species	Method	Source
EC50	3 h	>1,000	activated sludge of a	OECD Guideline 209	ECHA

United States: en Page: 10 / 17

Version number: 1.0

Endpoint	Exposure time	Value	Species	Method	Source
		mg/	predominantly do- mestic sewage		
NOEC	20 d	20 ^{µg} / _I	invertebrate marine organisms	-	ECHA
NOEC	72 h	1 ^{mg} / _l	algae (Scenedesmus subspicatus)	OECD Guideline 201	ECHA
NOEC	3 h	560 ^{mg} / _l	activated sludge of a predominantly do- mestic sewage	OECD Guideline 209	ECHA
LOEC	72 h	3.2 ^{mg} / _l	algae (Scenedesmus subspicatus)	OECD Guideline 201	ECHA

12.2 Persistence and degradability

Biodegradation

The study does not need to be conducted because the substance is inorganic.

Persistence

The study does not need to be conducted because the substance is inorganic.

12.3 Bioaccumulative potential

n-octanol/water (log KOW) not relevant (inorganic)

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Other adverse effects

Data are not available.

Remarks

Keep away from drains, surface and ground water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packages

Completely emptied packages can be recycled.

Handle contaminated packages in the same way as the substance itself.

United States: en Page: 11 / 17

Version number: 1.0

Remarks

Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1	UN numb	er
------	---------	----

ICAO-TI

DOT UN3077
IMDG-Code UN3077

14.2 UN proper shipping name

DOT Environmentally hazardous substance, solid,

n.o.s.

UN3077

IMDG-Code ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S.

ICAO-TI Environmentally hazardous substance, solid,

n.o.s.

Technical name manganese sulphate monohydrate

14.3 Transport hazard class(es)

DOT 9

IMDG-Code 9

ICAO-TI 9

14.4 Packing group

DOT

IMDG-Code III

ICAO-TI III

14.5 Environmental hazards hazardous to the aquatic environment

14.6 Special precautions for user -

14.7 Transport in bulk according to IMO -

instruments

14.8 <u>Information for each of the UN Model Regulations</u>

Transport of dangerous goods by road or rail (49 CFR US DOT) Additional information

Particulars in the shipper's declaration UN3077, Environmentally hazardous substance,

solid, n.o.s., (manganese sulphate monohydrate),

United States: en Page: 12 / 17

9, III

Danger label(s) 9, fish and tree

(1)

Environmental hazards yes

(hazardous to the aquatic environment)

Special provisions (SP) 8, 146, 335, 384, 441, A112, B54, B120, IB8, IP3,

N20, N91, T1, TP33

ERG No 171

International Maritime Dangerous Goods Code (IMDG) Additional information

Marine pollutant yes

(hazardous to the aquatic environment) (manganese sulphate monohydrate)

Danger label(s) 9, fish and tree

Special provisions (SP) 274, 335, 966, 967, 969

Excepted quantities (EQ) E1

Limited quantities (LQ) 5 kg

EmS F-A, S-F

Stowage category A

International Civil Aviation Organization (ICAO-IATA/DGR) Additional information

Environmental hazards yes

(hazardous to the aquatic environment)

Danger label(s) 9, fish and tree

Special provisions (SP) A97, A158, A179, A197, A215

Excepted quantities (EQ) E1

Limited quantities (LQ) 30 kg

United States: en Page: 13 / 17

Version number: 1.0

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA)

Substance is listed (ACTIVE)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

Not listed

Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings							
Name of substance	Name acc. to inventory	CAS No	Remarks	Effective date			
manganese sulphate mono- hydrate	manganese compounds		-	1987-01-01			

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Not listed

Clean Air Act

Not listed

Right to Know Hazardous Substance List

Toxic or Hazardous Substance List (MA-TURA)

Name of substance	Name acc. to inventory	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Thres hold	De Minimis Concentra- tion Threshold
manganese sulphate mono- hydrate	Manganese Compounds	-	1027	-	-	1.0 %

Hazardous Substances List (MN-ERTK)

Name of substance	Name acc. to inventory	CAS No	References	Remarks
manganese sulphate mono- hydrate	Manganese, elemental and compounds, as Mn	-	A, O	-

Legend

A American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Sub-

United States: en Page: 14 / 17

Version number: 1.0

Legend

- stances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH
- O Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division

Hazardous Substance List (NJ-RTK)

Name of substance	Name acc. to inventory	CAS No	Remarks	Classifica- tions	Listed in	Sub- stanc e num- ber	DOT num- ber
manganese sulphate monohydrate	manganese com- pounds	-	-		1 2 4 6 18 20	2324	-

Legend

- Occupational Safety and Health Administration, 29 CFR 1910-Occupational Safety and Health Standards, Subpart Z-Toxicand Hazardous Substances, July 1, 2008.
- List of Toxics Release Inventory Chemicals, Section 313, Emergency Planning and Community Right to Know Act (EPCRA), Toxics Release Inventory (TRI) Program, U.S. Environmental Protection Agency, 40 CFR 372.65, July 1, 2008.
- 2 "2009 TLVs® and BEIs®, Threshold Limit Values and Biological Exposure Indices," American Conference of Governmental Industrial Hygienists (ACGIH), 2009.
- List of Hazardous Substances and Reportable Quantities (RQ), Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), U.S. Environmental Protection Agency, 40 CFR 302, Table 302.4, July 1, 2008.
- 4 "NIOSH Pocket Guide to Chemical Hazards," National Institute for Occupational Safety and Health (NIOSH), U.S. Department of Health and Human Services, No. 2005-149, September 2005.
- 6 "Environmental Hazardous Substance List," New Jersey Department of Environmental Protection, N.J.A.C. 7:1G-2, as printed in the Community Right to Know Survey Instruction Book, 2008.

Hazardous Substance List (Chapter 323) (PA-RTK)

Name acc. to inventory	CAS No	Classification
MANGANESE	7439-96-5	*, E

Legend

- * Any compound of this substance is also an environmental hazard
- E Environmental hazard

Hazardous Substance List (RI-RTK)

Not listed

United States: en Page: 15 / 17

Version number: 1.0

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Not listed

Drug precursors, Chemicals designated within the Controlled Substances Act, 21 U.S.C. § 802, paragraphs 34 (list I) and 35 (list II)

Not listed

SECTION 16: Other information, including date of preparation or last revision

Date of preparation: 2024-12-06 **Abbreviations and acronyms**

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazard- ous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DEP CODE	Department of Environmental Protection Code
DGR	Dangerous Goods Regulations (see IATA/DGR)
DOT	Department of Transportation (USA)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
ERG No	Emergency Response Guidebook - Number
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HHS	Higher hazard substance
IARC	International Agency for Research on Cancer
IARC Mono- graphs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code

United States: en Page: 16 / 17

Version number: 1.0

Abbr.	Descriptions of used abbreviations	
IMDG-Code	International Maritime Dangerous Goods Code	
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval	
LHS	Lower hazard substance	
LOEC	Lowest Observed Effect Concentration	
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)	
NOEC	No Observed Effect Concentration	
OSHA	Occupational Safety and Health Administration (United States)	
PBT	Persistent, Bioaccumulative and Toxic	
PEL	Permissible exposure limit	
ppm	Parts per million	
STEL	Short-term exposure limit	
TWA	Time-weighted average	
vPvB	Very Persistent and very Bioaccumulative	

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200. Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H373	May cause damage to organs through prolonged or repeated exposure.

Responsible for the safety data sheet

Chemical Regulatory Compliance Company

Jasper, GA

Telephone: +1 (630) 410-1660
e-Mail: GHS@crc-us.com
Website: www.crc-us.com

USA

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

United States: en Page: 17 / 17