

MANGANESE POWDER EXTRA PURE

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□□ (EU) 2020/878 □□ □□ □□ REACH □□ (EC) 1907/2006 □□ □□

SDS Reference Number: 04498

□□ □□□□: 2/5/2019 □□ □□□□: 9/18/2025 □□ □□: 2/5/2019 □□: 1.0

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1.1. □□□□

□□ □□ : □□
 □□ □□ : MANGANESE POWDER EXTRA PURE
 EC □□ : 231-105-1
 CAS □□ : 7439-96-5
 □□ □□ : 04498
 □□ □□ : Metallic powders
 □□ □□ : Mn
 □□ □□ :

Mn

□□ □□ : Colloidal manganese

1.2. □□□□ □□ □□□□ □□ □□ □□ □□

□□ □□ □□ : Industrial
 □□/□□ □□ □□ : For professional use only
 □□□□/□□□□ □□ : Laboratory chemicals
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1.3. □□□□□□□□ □□ □□ □□

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info@lobachemie.com, www.lobachemie.com

1.4. □□□□□□

□□ □□ □□ : + 91 22 6663 6663 (9:00am - 6:00 pm)

□□ 2: □□□·□□□

2.1. □□□·□□□ □□

Regulation (EC) No.1272/2008 [CLP] □□ □□ □□

□□□□ □□ □□ □□, □□ 1 H260

H-□□ □□ EUH-□□ □□: □□ 16 □□

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2.2. □□□□□□□□ □□ □□□□ □□

□□ (EC) No. 1272/2008 □□ □□ □□ □□ [CLP]

□□ □□ □□□□ (CLP)



GHS02

□□ □□ (CLP) : □□

MANGANESE POWDER EXTRA PURE

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□□ (EU) 2020/878 □□ □□□ REACH □□ (EC) 1907/2006 □□ □□

- □□ (CLP) : H260 - □□ □□ □ □□□□ □□ □□ □□ □□□□.
- □□ □□(CLP) : P223 - □□ □□□□□ □□□.
- P231+P232 - □□□□ □□□ □□ □□ □□ □□□□□□. □□□ □□□□□□.
- P370+P378 - □□ □ □□ □□ □□ □□□ □□ □(□) □□□□□□.
- P422 - □□□ □□□ □□ □(□) □□□□ □□□□□□.

2.3. □□ □□

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□□ 3: □□□□□ □□ □ □□□

3.1. □□□□

□□ □□ : □□□□□□

□□	□□□□	%
MANGANESE POWDER	CAS □□: 7439-96-5 EC □□: 231-105-1	100

□□ 4: □□□□□□

4.1. □□□□ □□

- □□ □□ : If you feel unwell, seek medical advice.
- □ : □□□ □□□ □□ □□□ □□ □□□□ □□ □□□ □□□□□. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
- □□□□ □ : □□□ □□ □□□□□□. □□□ □□ □□□□[□□ □□ □□□ □□□□]. □□□□□ □□□ □□□ □□, □□□ □□ □□□□ □□ □□□ □□□□. Wash skin with plenty of water.
- □□□□ □ : □□□□ □□□□□□ □□□□□□. □□ □□□□. □ □□ □□ □□□□ □□□□. □□ □□□ □□□□: □□□ □ □□/□□□ □□□□□.
- □ : Rinse mouth out with water. If you feel unwell, seek medical advice. □□□□ □□□ □□□□(□□)□ □□□ □□□□□.
- Self protection of the first-aid : □□□□ □□□□ □□□ □□ □□ □□□ □□□□ □□□□.

4.2. □□ □ □□□□ □□ □□□ □□ □ □□

- □ □□/□□ : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure.
- □□ □ □□/□□ : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
- □□ □ □□/□□ : None under normal conditions. Dust from this product may cause eye irritation.
- □ □□/□□ : None under normal conditions.

4.3. □□□□ □□ □ □□ □□ □□ □□ □□

Treat symptomatically.

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5.1. □□□ □□□

- □□□ : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Dry powder. Foam.
- □□□ : Do not use a heavy water stream.

5.2. □□□□□□□ □□□ □□ □□□

- □□ : □□□ □□.
- □□ : May form flammable/explosive vapour-air mixture.
- □ □□□ □□□ □□ : Toxic fumes may be released.

MANGANESE POWDER EXTRA PURE

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□□ (EU) 2020/878 □□ □□□ REACH □□ (EC) 1907/2006 □□ □□

□□ 8: □□□□ □□□□□□

8.1. □□ □□ □□

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8.2. □□□□

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Ensure good ventilation of the work station.

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Wear recommended personal protective equipment.

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Chemical goggles or safety glasses. Safety glasses

Skin protection

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Wear a mask

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Protective gloves

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Wear appropriate mask

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9.1. □□□□ □□□□□ □□□ □□ □□

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: Brownish black.

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: Crystalline powder.

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: 54.94 g/mol

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: Odourless.

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: 1246 °C

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MANGANESE POWDER EXTRA PURE

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□□ (EU) 2020/878 □□ □□□ REACH □□ (EC) 1907/2006 □□ □□

□□□□ : □: Insoluble in water
Partition coefficient n-octanol/water (Log Kow) : □□□□
□□□□ : 1 Pa at 955 °C
50°C□□□□ □□□□ : □□□□
□□ : 7.476 g/cm³ at 20 °C
□□ : □□□□
20°C□□□□ □□ □□ □□ : □□□□
Particle size : □□□□

9.2. □□□□□□□□

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□□ 10: □□□□ □□□□

10.1. □□□□

The product is non-reactive under normal conditions of use, storage and transport.

10.2. □□□□ □□□□

□□□□ □□. May form flammable/explosive vapour-air mixture.

10.3. □□ □□□□ □□□□

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10.4. □□□□ □□□□

Open flame. Overheating. □□□□□. □. Sparks. Water, humidity.

10.5. □□□□ □□□□

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10.6. □□□□ □□□□ □□□□

May release flammable gases.

□□ 11: □□□□ □□□□

11.1. □□ (EC) No 1272/2008 □□□□, □□□□ □□□□ □□□□

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MANGANESE POWDER EXTRA PURE (7439-96-5)

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11.2. □□□□ □□□□

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MANGANESE POWDER EXTRA PURE

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□□ (EU) 2020/878 □□ □□□ REACH □□ (EC) 1907/2006 □□ □□

□□ 12: □□□ □□□ □□

12.1. □□

□□□ - □□ : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
□□ □□□□ □□□ : □□□□ □□
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12.2. □□□ □ □□□

MANGANESE POWDER EXTRA PURE (7439-96-5)	
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12.3. □□ □□□

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12.4. □□ □□□

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12.5. PBT □ vPvB □□ □□

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12.6. □□□ □□ □□

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12.7. □□ □□ □□

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□□ 13: □□□ □□□□

13.1. □□□ □□□

□□ □□(□□□) : Disposal must be done according to official regulations.
□□□ □□□ : Dispose of contents/container in accordance with licensed collector's sorting instructions.
□□ □□ □□ □□ : Disposal must be done according to official regulations.
□□/□□ □□ □□□□ : □□, □□, □□ □/□□ □□ □□□□ □□ □□ □□□□ □□ □□ □ □□□□ □□□ □□□□□□.
Disposal must be done according to official regulations.
□□ □□ : Handle empty containers with care because residual vapours are flammable. Do not re-use empty containers.

□□ 14: □□□ □□□ □□

ADR / IMDG / IATA / ADN / RID □□ □□

14.1. UN □□ □□ ID □□

UN-□□ (ADR) : UN 3089
UN-□□ (IMDG) : UN 3089
UN-□□ (IATA) : UN 3089
UN-□□ (ADN) : UN 3089
UN-□□ (RID) : UN 3089

14.2. UN □□ □□□

□□ □□□ (ADR) : □□ □□, □□□□, □□ □□□□ □□□ □□ □
□□ □□□ (IMDG) : METAL POWDER, FLAMMABLE, N.O.S.
□□ □□□ (IATA) : Metal powder, flammable, n.o.s.
□□ □□□ (ADN) : □□ □□, □□□□, □□ □□□□ □□□ □□ □

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□□ (EU) 2020/878 □□ □□□ REACH □□ (EC) 1907/2006 □□ □□

□□ □□□ (RID)	: □□ □□, □□□□, □□ □□□ □□□ □□ □
□□ □□ □□ (ADR) (ADR)	: UN 3089 □□ □□, □□□□, □□ □□□ □□□ □□ □ (MANGANESE POWDER), 4.1, III, (E)
Transport document description (IMDG)	: UN 3089 METAL POWDER, FLAMMABLE, N.O.S., 4.1, III
Transport document description (IATA)	: UN 3089 Metal powder, flammable, n.o.s. (MANGANESE POWDER), 4.1, III
Transport document description (ADN)	: UN 3089 □□ □□, □□□□, □□ □□□ □□□ □□ □, 4.1, III
Transport document description (RID)	: UN 3089 □□ □□, □□□□, □□ □□□ □□□ □□ □, 4.1, III

14.3. □□□□□ □□□ □□

ADR

□□□□□ □□□ □□ (ADR)	: 4.1
□□ □□ (ADR)	: 4.1



IMDG

□□□□□ □□□ □□ (IMDG)	: 4.1
□□ □□ (IMDG)	: 4.1



IATA

□□□□□ □□□ □□ (IATA)	: 4.1
□□ □□ (IATA)	: 4.1



ADN

□□□□□ □□□ □□ (ADN)	: 4.1
□□ □□ (ADN)	: 4.1



RID

□□□□□ □□□ □□ (RID)	: 4.1
□□ □□ (RID)	: 4.1



14.4. □□□□

□□ □□ (ADR)	: III
□□ □□ (IMDG)	: III
□□ □□ (IATA)	: III
□□ □□ (ADN)	: III
□□ □□ (RID)	: III

14.5. □□ □□□

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EmS-No. (□□) : F-G
 EmS-No. (□□) : S-G
 □□ □□□□ : □□ □□ □□ □□

14.6. □□□□ □□ □□ □□□□

□□ □□ : F3
 □□ □□ (ADR) : 552
 □□ □□(ADR) : 5kg
 □□□(ADR) : E1
 □□□(ADR) : P002, IBC08, R001
 □□ □□ (ADR) : B4
 □□ □□ □□ □□ □□(ADR) : MP11
 □□□ □□ □ □□ □□□□ □□ (ADR) : T1
 □□□ □□ □ □□ □□□□ □□ □□ (ADR) : TP33
 □□ □□(ADR) : SGAV
 □□ □□□□ □□ : AT
 □□ □□(ADR) : 3
 □□ □□ □□ □□ - □□(ADR) : V11
 □□ □□ □□ □□ - □□ □□(ADR) : VC1, VC2
 □□ □□ □□(Kemler □□) : 40
 Orange plates (□□□□□□) :



□□ □□ □□ (ADR) : E
 EAC □□ : 4Y

□□ □□ :
 □□ □□ (IMDG) : 223
 □□ □□(IMDG) : 5 kg
 □□□(IMDG) : E1
 □□ □□ (IMDG) : P002
 IBC □□ □□(IMDG) : IBC08
 IBC □□ □□ (IMDG) : B21, B4
 □□ □□ (IMDG) : T1
 □□ □□ □□ (IMDG) : TP33
 □□ □□ (IMDG) : B
 □□ □□ □□(IMDG) : H1
 □□(IMDG) : SGG7, SGG15, SG17, SG25, SG26
 MFAG-□□ : 138

□□ □□ :
 PCA □□ □□(IATA) : E1
 PCA □□ □□(IATA) : Y443
 PCA □□ □□ □□ □□ □□(IATA) : 10kg
 PCA □□ □□(IATA) : 446
 PCA □□ □□□(IATA) : 25kg
 CAO □□ □□(IATA) : 449
 CAO □□ □□□(IATA) : 100kg
 □□ □□(IATA) : A3, A803
 ERG □□(IATA) : 3L

□□ □□ □□ :
 □□ □□(ADN) : F3
 □□ □□(ADN) : 552
 □□□(ADN) : 5 kg
 □□□(ADN) : E1
 □□ □□(ADN) : PP
 □□ □□/□□□□ □□(ADN) : 0

MANGANESE POWDER EXTRA PURE

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- □□(RID) : F3
- □□(RID) : 552
- □□(RID) : 5kg
- (RID) : E1
- □□ (RID) : P002, IBC08, R001
- □□ (RID) : B4
- □□ □□ □□ □□(RID) : MP11
- □□ □ □□ □□□□ □□ (RID) : T1
- □□ □ □□ □□□□ □□ □□ (RID) : TP33
- RID □□□ □□ □□(RID) : SGAV
- □□(RID) : 3
- □□ □□ □□ - □□(RID) : W1
- □□ □□ □□ - □□ □□(RID) : VC1, VC2
- □□□□ : CE11
- □□ □□ (RID) : 40

14.7. □□□□□□(IMO) □□ □□ □□ □□ □□

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□□ 15: □□ □□□□

15.1. □□, □□ □ □□□ □□□□ □□□□ □□ □□□□ □□ □□ □□/□□

EU □□

REACH □□□ XVII (□□ □□)

EU restriction □□ (REACH Annex XVII)	
□□ □□	□□ □□
40.	MANGANESE POWDER EXTRA PURE

REACH □□□ XIV (□□ □□)

REACH □□□ XIV (□□ □□) □□□□ □□

REACH □□ □□ □□ (SVHC)

REACH □□ □□ □□□ □□□□ □□

PIC □□ (□□□□□□)

PIC □□□ □□□□ □□ (□□ EU 649/2012)

POP □□ (□□□□ □□ □□□□)

POP □□□ □□□□ □□ (□□ EU 2019/1021)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

□□□□ □□(428/2009)

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

□□ □□□□ □□ (2019/1148)

Not listed on the Explosives Precursors list (EU)

□□ □□□□ □□ (273/2004)

Not listed on the Drug Precursors list (EU)

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WGK : WGK 2, □□□ □□□ □□ (Classification according to AwSV; ID □□ 9369).

MANGANESE POWDER EXTRA PURE

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□□ (EU) 2020/878 □□ □□□ REACH □□ (EC) 1907/2006 □□ □□

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- SZW-lijst van kankerverwekkende stoffen : □□□ □□□□ □□□□□.
- SZW-lijst van mutagene stoffen : □□□ □□□□ □□□□□.
- SZW-lijst van reprotoxische stoffen – Borstvoeding : □□□ □□□□ □□□□□.
- SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : MANGANESE POWDER□(□) □□□ □□□□□
- SZW-lijst van reprotoxische stoffen – Ontwikkeling : MANGANESE POWDER□(□) □□□ □□□□□

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- □□ □□ : Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
- Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
- The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
- Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
- Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
- Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
- The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)
- Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
- Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
- ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)

15.2. □□ □□ □□□ □□

No chemical safety assessment has been carried out

□□ 16: □ □□ □□□□

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ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	□□ □□ □
BOD	Biochemical oxygen demand (BOD)
CAS □□	□□□□ □□ □□ □□(CAS)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	□□□ □□ □□□
CSA	□□ □□ □□□ □□
DMEL	Derived Minimal Effect level
DNEL	□□ □□□ □□

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EC □□	□□ □□□ □□
EC50	Median effective concentration
ED	□□□ □□□□
EN	□□ □□
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	□□□ □□ □□
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	□□ □□□ □□
PPE	□□ □□□
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	□□□□□□□□
STP	Sewage treatment plant
TF	□□□ □□
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
COV	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	□□ □□ □□□

H-□□ □ EUH-□□ □□:	
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H260	□□ □□ □ □□□□ □□□ □□□ □□□□.

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