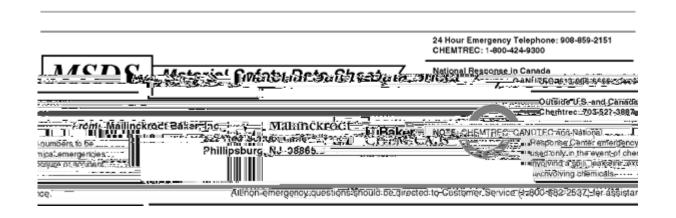
MSDS Number: M _ **** *Effective Date:* 08/17/06 **** *Supercedes:* 12/05/03



MANGANE E LAE

Prod ¢ dent f.c.t.on

ynony Manganous sulfate, monohydrate; sulfuric acid, manganese (2+) salt (1:1), monohydrate; Manganese (II) sulfate, monohydrate
CA No 7785-87-7 (Anhydrous) 10034-96-5 (Monohydrate)
Mo ec r e t 169.02
C e c or MnSO4 H2O
Prod t Code
J.T. Baker: 2550, 2552
Mallinckrodt: 2147, 6097, 6192, 6200, 7780

Co pot on nfor t on on n red ent

Ingredient	CAS No	Percent	Hazardous
Manganese(II) Sulfate (1:1)	7785-87-7	98 - 100%	Yes

k z.rd dent f.c.t.on

E er ency O er .e

E po re Cont ro Per on Protect on

A r orne E po re L t - OSHA Permissible Exposure Limit (PEL): 5 mg/m3 Ceiling for manganese compounds as Mn

- ACGIH Threshold Limit Value (TLV):

0.2 mg/m3 (TWA) for manganese, elemental and inorganic compounds as Mn

ent ton yte

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Per on e p.r.t or (NO Appro ed

If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

700C (1292F) Loses all water @ 400-500C . por Den t y (A.r No information found. . por Pre re () No information found. E . por.t on .t e (B Ac No information found.

t. ty.nd e.t. ty

t. ty
Stable under ordinary conditions of use and storage.
z. rdo Deco pot on Prod t
Oxides of sulfur and the contained metal.
z. rdo Poy er. z.t. on
Will not occur.
nco p.t. t.e
Powdered metals, strong oxidizers.
Condt. on to A o.d
Incompatibles.

o.coo.c. nfor t.on

o . co o . c. D.t .

Oral rat LD50: 2150 mg/kg. Investigated as a tumorigen, mutagen, reproductive effector. eprod **¢**. **e o** .c**t** y

For manganese metal: May damage the reproductive system. Has shown teratogenic effects in laboratory anim

D. po _ Con . der.t . on

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

r. n pot nfor _t _on

Not regulated.

5 e .t ory nfor .t .on

Q er nfor _t .on

N PA t n Health: Flammability: Reactivity:

L. e h z. rd . rn n

WARNING! HARMFUL IF SWALLOWED OR INHALED. AFFECTS LUNGS, CENTRAL NERVOUS SYSTEM, BLOOD AND KIDNEYS. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

L. e Prec. t.on

Wash thoroughly after handling. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep container closed. Use only with adequate ventilation.

L. e rt A.d

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, induce vomiting immediately as directed by medical