



chemists helping chemists in research & industry

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DATE: 07/21/92
CUST#: 946188
PO#: P0071984

M A T E R I A L S A F E T Y D A T A S H E E T

PAGE 1

IDENTIFICATION

PRODUCT #: 22432-4
CAS #: 1313-13-9
MF: MND2

NAME: MANGANESE(IV) OXIDE, ACTIVATED, BLACK

SYNONYMS

BLACK MANGANESE OXIDE * BOG MANGANESE * BRAUNSTEIN (GERMAN) *
BRUINSTEEN (DUTCH) * CEMENT BLACK * C.I. 77728 * C.I. PIGMENT BLACK
14 * C.I. PIGMENT BROWN 8 * MANGAANBIOXYDE (DUTCH) * MANGAANDIOXYDE
(DUTCH) * MANGANDIOXID (GERMAN) * MANGANESE BINOXIDE * MANGANESE
(BIOSSIDO DI) (ITALIAN) * MANGANESE (BIOXYD DE) (FRENCH) * MANGANESE
BLACK * MANGANESE (DIOSSIDO DI) (ITALIAN) * MANGANESE (DIOXYDE DE)
(FRENCH) * MANGANESE OXIDE * MANGANESE (IV) OXIDE * MANGANESE
PEROXIDE * MANGANESE SUPEROXIDE * PYROLUSITE BROWN *

TOXICITY HAZARDS

RTECS NO: DP0350000

MANGANESE DIOXIDE

TOXICITY DATA

SCU-MUS LD50:422 MG/KG

ZVKOA6 19,186,74

REVIEWS, STANDARDS, AND REGULATIONS

ACGIH TLV-TWA 5 MG(MN)/M3 85INA8 5,354(88),86
MSHA STANDARD-AIR:CL 5 MG(MN)/M3 DTLVS* 3,149,71
OSHA PEL:CL 5 MG(MN)/M3 FEREAC 54,2923,89
OSHA PEL FINAL:CL 5 MG(MN)/M3 FEREAC 54,2923,89
NOHS 1974: HZD 44030; NIS 48; TNF 3820; NOS 60; TNE 53685
NOES 1983: HZD 44030; NIS 41; TNF 3347; NOS 50; TNE 71963; TFE 15526
EPA TSCA CHEMICAL INVENTORY, JUNE 1990
EPA TSCA SECTION 8(E) STATUS REPORT 8EHQ-0286-0588
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, MARCH 1992

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS)
DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

HEALTH HAZARD DATA

ACUTE EFFECTS

HARMFUL IF INHALED OR ABSORBED THROUGH SKIN.
MAY BE HARMFUL IF SWALLOWED.
CAUSES EYE AND SKIN IRRITATION.
TARGET ORGAN(S):
NERVES
LUNGS

CONTINUED ON NEXT PAGE

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HEALTH HAZARD DATA

FIRST AID

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.

CALL A PHYSICIAN.

WASH CONTAMINATED CLOTHING BEFORE REUSE.

ADDITIONAL INFORMATION

MEN EXPOSED TO MANGANESE DUSTS SHOWED A DECREASE IN FERTILITY.

CHRONIC MANGANESE POISONING PRIMARILY INVOLVES THE CENTRAL NERVOUS SYSTEM. EARLY SYMPTOMS INCLUDE LANGUOR, SLEEPINESS AND WEAKNESS IN THE LEGS. A STOLID MASK-LIKE APPEARANCE OF THE FACE, EMOTIONAL

DISTURBANCES SUCH AS UNCONTROLLABLE LAUGHTER AND A SPASTIC GAIT WITH TENDENCY TO FALL IN WALKING ARE FINDINGS IN MORE ADVANCED CASES. HIGH

INCIDENCE OF PNEUMONIA HAS BEEN FOUND IN WORKERS EXPOSED TO THE DUST OR FUME OF SOME MANGANESE COMPOUNDS.

PHYSICAL DATA

SPECIFIC GRAVITY: 5.026

APPEARANCE AND ODOR
BLACK POWDER

FIRE AND EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA

NONCOMBUSTIBLE.

USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

OXIDIZER.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE.

REACTIVITY DATA

INCOMPATIBILITIES

STRONG ACIDS

CONTINUED ON NEXT PAGE

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REACTIVITY DATA

STRONG REDUCING AGENTS
ORGANIC MATERIALS
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
NATURE OF DECOMPOSITION PRODUCTS NOT KNOWN.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
AVOID RAISING DUST.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.
WASTE DISPOSAL METHOD
BURY IN A LANDFILL SITE APPROVED FOR THE DISPOSAL OF CHEMICAL AND HAZARDOUS WASTES.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
SAFETY SHOWER AND EYE BATH.
MECHANICAL EXHAUST REQUIRED.
DO NOT BREATHE DUST.
AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
IRRITATING DUST.
HARMFUL SOLID.
KEEP TIGHTLY CLOSED.
DO NOT STORE NEAR, NOR ALLOW CONTACT WITH, CLOTHING AND OTHER COMBUSTIBLE MATERIAL.
STORE IN A COOL DRY PLACE.
LABEL PRECAUTIONARY STATEMENTS
OXIDIZING
HARMFUL
CONTACT WITH COMBUSTIBLE MATERIAL MAY CAUSE FIRE.
HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.
IRRITATING TO EYES AND SKIN.

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--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---

TARGET ORGAN(S):

CENTRAL NERVOUS SYSTEM
LUNGS

KEEP AWAY FROM COMBUSTIBLE MATERIAL.

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.

WEAR SUITABLE PROTECTIVE CLOTHING.

REGULATORY INFORMATION

THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE
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