# MANGANESE DIOXIDE CAS # 1313139

A Special Carcinogen E Dermal Hazard I Neurotoxin

B Human Terato\Repro Haz F Corrosive J Suspect Carcinogen

C Highly Toxic G Eye Damage K Suspect Terato\Repro Haz

D Inhalation Hazard H STEL L Sensitizers

HAZARD INDEX . . . . . . . . I . . .

NFPA HAZARD CODES (H,F,R,O) 1 0 0

ACUTE TOXICTY RISK INDEX 2.2 - LD50 3478.0 mg/Kg

NEUROTOXIC - RISK INDEX 4.0

INHALATION RISK INDEX <1 - LC50

ROUTE OF EXPOSURE

skin Contact: May cause skin irritation.

skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: Harmful if inhaled. Material may be irritating to

mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed.

TARGET ORGAN(S) OR SYSTEM(S)

Nerves. Lungs.

SIGNS AND SYMPTOMS OF EXPOSURE

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 CHARACTERISTICS

PHYSICAL STATE: Solid

SEGREGATION: SHELF # 2

STORAGE GROUP(S):

g - Non-Reactive/Non-Hazardous

WASTE CHARACTERISTIC HAZARD:

INCOMPATIBILITIES:Strong acids, Strong reducing agents, Organic

FIRE EXTINGUISHER: Water spray. Carbon dioxide, dry chemical powder, or

appropriate foam.

REACTIVE PROPERTIES

HANDLING: Do not breathe dust. Avoid contact with eyes, skin, and clothing.

Avoid prolonged or repeated exposure. STORAGE: Keep tightly closed.

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION

EU DIRECTIVES CLASSIFICATION

Symbol of Danger: Xn

Indication of Danger: Harmful.

R: 20/22

Risk Statements: Harmful by inhalation and if swallowed.

S: 25

Safety Statements: Avoid contact with eyes.

Immediately Dangerous to Life and Health 500 mg/m3

US DEPARTMENT OF ENERGY TEEL'S

DOE Occupational Exposure Limit .317 mg/m3

DOE Short Term Exposure Limit 4.75 mg/m3

DOE Ceiling Limit 79.1 mg/m3

Immediately Dangerous to Life and Health 500 mg/m3

The information presented in the OPMSDS is intended as a synopsis of relative hazard characteristics for this chemical, for application within the UMass-Boston Chem/XL Laboratory Program. This information is derived from a wide range of sources documented in that program. While these sources are considered credible, the user is cautioned that the university cannot guarantee the accuracy nor accept responsibility for damages which may arise from errors, omissions, or the use of this information in any context other than intended. The user is strongly encouraged to seek additional information whenever feasible.