# MANGANESE CAS # 7439965 HAZARDOUS CHEMICAL OF CONCERN

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) 0 2 1 W

ACUTE TOXICTY RISK INDEX 1.7 - LD50 9000.0 mg/Kg

NEUROTOXIC - RISK INDEX 4.0

INHALATION RISK INDEX 1.1 - 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: May be harmful if inhaled. Material may be

irritating to mucous membranes and upper respiratory tract.

Ingestion: May be 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.

CONDITIONS AGGRAVATED BY EXPOSURE

May cause nervous system disturbances. The scientific literature

reports that welders who were chronically exosed to various

Manganese oxides develop Manganism, a illness similar to

Parkinson's disease. Avoid contact with Manganese fumes

associated with welding, oxidizing or melting of Manganese

PHYSICAL CHARACTERISTICS

PHYSICAL STATE: Solid

Flammable

VAPOR PRESSURE\*\*\*\*\* mm Hg @ 20 °C

Reacts violently with water

SEGREGATION: SHELF # 1

STORAGE GROUP(S):

b - Pyrophoric/Water Reactive

l - Flammable/Combustible Solvent

WASTE CHARACTERISTIC HAZARD: REACTIVE

INCOMPATIBILITIES:Bases, Phosphorus, Sulfur oxides, Halogens, Acids.

FIRE EXTINGUISHER: Dry chemical powder. Do not use water

REACTIVE PROPERTIES

HANDLING: Avoid contact with eyes, skin, and clothing. Avoid breathing

dust. Avoid prolonged or repeated exposure. STORAGE: Keep container closed.

Keep away from heat, sparks, and open flame\. SPECIAL REQUIREMENTS Moisture

sensitive.

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: F

Indication of Danger: Highly Flammable.

R: 11

Risk Statements: Highly flammable.

S: 22

Safety Statements: Do not breathe dust.

US DEPARTMENT OF ENERGY TEEL'S

DOE Occupational Exposure Limit .2 mg/m3

DOE Short Term Exposure Limit 3 mg/m3

DOE Ceiling Limit 5 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.