# MALONONITRILE CAS # 109773

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 . . . D E . . . I J K .

NFPA HAZARD CODES (H,F,R,O) 4 2 0

ACUTE TOXICTY RISK INDEX 3.9 - LD50 61.3 mg/Kg

NEUROTOXIC - RISK INDEX 5.0

INHALATION HAZARD INHALATION RISK INDEX <1 - LC50

ROUTE OF EXPOSURE

skin Contact: Causes skin irritation.

skin Absorption: May be fatal if absorbed through skin. Readily

absorbed through skin.

Eye Contact: Causes eye irritation.

Inhalation: May be fatal if inhaled. Material is irritating to

mucous membranes and upper respiratory tract.

Ingestion: May be fatal if swallowed.

TARGET ORGAN(S) OR SYSTEM(S)

Blood. Central nervous system. Cardiovascular system.

SIGNS AND SYMPTOMS OF EXPOSURE

May be partially metabolized to cyanide in the body. The onset

of symptoms is generally delayed pending conversion to cyanide.

Symptoms of exposure may include headache, dizziness,

convulsions, cyanosis, irregular breathing, and weak pulse. Lung

irritation. CNS depression.

PHYSICAL CHARACTERISTICS

PHYSICAL STATE: Solid

Ccombustible

FLASH POINT 186.8 °F

SEGREGATION: SHELF # 1

STORAGE GROUP(S):

l - Flammable/Combustible Solvent

WASTE CHARACTERISTIC HAZARD: TOXIC

INCOMPATIBILITIES:Strong oxidizing agents, Strong acids, Strong bases,

Strong reducing agents.

FIRE EXTINGUISHER: Carbon dioxide, dry chemical powder, or appropriate foam.

TOXIC EMISSIONS WHEN BURNED: Nitrogen oxides Hydrogen cyanide

REACTIVE PROPERTIES

HANDLING: Do not breathe dust. Do not get in eyes, on skin, on clothing.

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

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION

EU DIRECTIVES CLASSIFICATION

Symbol of Danger: T N

Indication of Danger: Toxic. Dangerous for the environment.

R: 23/24/25 50/53

Risk Statements: Toxic by inhalation, in contact with skin and

if swallowed. Very toxic to aquatic organisms, may cause

long-term adverse effects in the aquatic environment.

S: 23 27 45 60 61

Safety Statements: Do not breathe vapor. Take off immediately

all contaminated clothing. In case of accident or if you feel

unwell, seek medical advice immediately (show the label where

possible). This material and its container must be disposed of

as hazardous waste. Avoid release to the environment. Refer to

special instructions/safety data sheets.

Immediately Dangerous to Life and Health 25 mg/m3

US DEPARTMENT OF ENERGY TEEL'S

DOE Occupational Exposure Limit 3.5 ppm

DOE Short Term Exposure Limit 3.5 ppm

DOE Ceiling Limit 3.5 ppm

Immediately Dangerous to Life and Health 7.5 ppm

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.