# ACETONITRILE CAS # 75058 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 . . . D . . G H I J K .

NFPA HAZARD CODES (H,F,R,O) 2 3 0

REPRODUCTIVE RISK INDEX 1.9

ACUTE TOXICTY RISK INDEX 2.3 - LD50 2460.0 mg/Kg

NEUROTOXIC - RISK INDEX 5.0

INHALATION HAZARD INHALATION RISK INDEX 2.9 - LC50 9475.0

ROUTE OF EXPOSURE

skin Contact: May cause skin irritation.

skin Absorption: Harmful if absorbed through skin.

Eye Contact: Causes severe 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)

Central nervous system. Liver. Kidneys. Blood. Lungs.

SIGNS AND SYMPTOMS OF EXPOSURE

The onset of symptoms is generally delayed pending conversion to

cyanide. This material can produce a cyanide like effect. Always

have a cyanide first-aid kit present when using this material.

Adverse effects may include nausea, vomiting, diarrhea,

headache, dizziness, rashes and cyanosis. Other symptoms include

mental excitement or depression, drowsiness, impaired

perception, incoordination, stupor, coma, and death.

CONDITIONS AGGRAVATED BY EXPOSURE

Acetonitrile is metabolized in the liver to water, formic acid,

and hydrogen cyanide. The cyanide is further metabolized to

thiocyanate.

PHYSICAL CHARACTERISTICS

PHYSICAL STATE: Liquid

Flammable

VAPOR PRESSURE 72.8 mm Hg @ 20 °C

FLASH POINT 35.6 °F

Store in an explosion-proof refrigerator or tightly stoppered in a

well-ventilated area

SEGREGATION: SHELF # 1

STORAGE GROUP(S):

l - Flammable/Combustible Solvent

WASTE CHARACTERISTIC HAZARD: IGNITABLE TOXIC

INCOMPATIBILITIES:Acids, Bases, Oxidizing agents, Reducing agents, Alkali

metals.

FIRE EXTINGUISHER: For small (incipient) fires, use media such as foam,dry

chemical, or carbon dioxide. For large fires, use media such as foam, dry

chemical, carbon dioxide or water.

TOXIC EMISSIONS WHEN BURNED: Nitrogen oxides Hydrogen cyanide

REACTIVE PROPERTIES

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

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

away from heat, sparks, and open flame. Handle and store under nitrogen\.

SPECIAL REQUIREMENTS Handle and store under inert gas.

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION

EU DIRECTIVES CLASSIFICATION

Symbol of Danger: F-Xn

Indication of Danger: Highly Flammable. Harmful.

R: 11-20/21/22-36

Risk Statements: Highly flammable. Harmful by inhalation, in

contact with skin and if swallowed. Irritating to eyes.

S: 16-36/37

Safety Statements: Keep away from sources of ignition - no

smoking. Wear suitable protective clothing and gloves.

OSHA REGULATORY LIMITS

OSHA Permissible Exposure Limit 40 ppm

OSHA Short Term Exposure Limit 60 ppm

ACGIH RECOMMENDED LIMITS

ACGIH Threshold Limit Value 20 ppm

ACGIH Short Term Exposure Limit 60 ppm

Immediately Dangerous to Life and Health 25 mg/m3

US DEPARTMENT OF ENERGY TEEL'S

DOE Occupational Exposure Limit 40 ppm

DOE Short Term Exposure Limit 60 ppm

DOE Ceiling Limit 60 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.