# ACRYLONITRILE CAS # 107131 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 A . . D E . G H I . K L

NFPA HAZARD CODES (H,F,R,O) 4 3 0

SPECIAL CARCINOGEN - DESIGNATED AREA MAY BE REQUIRED

CHRONIC TOXICITY RISK INDEX 3.4 - TD50 16.9 mg/Kg

ACUTE TOXICTY RISK INDEX 3.8 - LD50 78.0 mg/Kg

NEUROTOXIC - RISK INDEX 5.0

INHALATION HAZARD INHALATION RISK INDEX 4.1 - LC50

cancer hazard

ROUTE OF EXPOSURE

skin Contact: Causes burns.

skin Absorption: Toxic if absorbed through skin.

Eye Contact: Causes burns.

Inhalation: Toxic if inhaled. Material may be irritating to

mucous membranes and upper respiratory tract. Material is

extremely destructive to the tissue of the mucous membranes and

upper respiratory tract.

Ingestion: Toxic if swallowed.

TARGET ORGAN(S) OR SYSTEM(S)

Liver. Central nervous system. Cardiovascular system. Kidneys.

SIGNS AND SYMPTOMS OF EXPOSURE

Material is extremely destructive to tissue of the mucous

membranes and upper respiratory tract, eyes, and skin. Symptoms

of exposure may include burning sensation, coughing, wheezing,

laryngitis, shortness of breath, headache, nausea, and vomiting.

Inhalation may result in spasm, inflammation and edema of the

larynxand bronchi, chemical pneumonitis, and pulmonary edema. To

the best of our knowledge, the chemical, physical, and

toxicological properties have not been thoroughly investigated.

May be partially metabolized to cyanide in the body. CNS

depression. Ataxia. Symptoms may be delayed.

PHYSICAL CHARACTERISTICS

PHYSICAL STATE: Liquid

Flammable

VAPOR PRESSURE 86.0 mm Hg @ 20 °C

FLASH POINT 23 °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:Oxidizing agents Copper, Copper alloys.

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

appropriate foam.

REACTIVE PROPERTIES

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

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

from heat, sparks, and open flame\. SPECIAL REQUIREMENTS Heat and light

sensitive.

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION

EU DIRECTIVES CLASSIFICATION

Symbol of Danger: F T N

Indication of Danger: Highly Flammable. Toxic. Dangerous for the

environment.

R: 45 11 23/24/25 41 43 51/53 37/38

Risk Statements: May cause cancer. Highly flammable. Toxic by

inhalation, in contact with skin and if swallowed. Risk of

serious damage to eyes. May cause sensitization by skin contact.

Toxic to aquatic organisms, may cause long-term adverse effects

in the aquatic environment. Irritating to respiratory system and

skin.

S: 53 9 16 45 61

Safety Statements: Restricted to professional users. Attention -

Avoid exposure - obtain special instructions before use. Keep

container in a well-ventilated place. Keep away from sources of

ignition - no smoking. In case of accident or if you feel

unwell, seek medical advice immediately (show the label where

possible). Avoid release to the environment. Refer to special

instructions/safety data sheets.

Immediately Dangerous to Life and Health 85 ppm

US DEPARTMENT OF ENERGY TEEL'S

DOE Occupational Exposure Limit 2 ppm

DOE Short Term Exposure Limit 10 ppm

DOE Ceiling Limit 35 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.