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SECTION 5 FIRE FIGHTING MEASURES

Flashpoint / Method: 0 - 5 Degrees F. (-18 - -15 Degrees C) / PMCC

Flammability: LEL = 1.8 % Volume, UEL = 11.5 % Volume

Extinguishing Use dry chemical, CO2, or foam to extinguish fire. Cool fire Media: exposed container with water. Water may be ineffective as an

extinguishing agent.

Special Fire Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in

Procedure: areas where chemicals are used or stored

Unusual Fire and Extremely flammable liquid. Keep away from heat and all Explosion sources of ignition including sparks, flames, lighted cigarettes and pilot lights. Containers may rupture or

explode in the heat of a fire. Vapors are heavier than air and may travel to a remote ignition source and flash back. This product contains tetrahydrofuran that may form explosive organic peroxide when exposed to air or light or with age. Combustion will produce toxic and irritating vapors including

Hazardous Combustion will produce toxic and in Decomposition carbon monoxide and carbon dioxide.

Products:

# SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill or Remove all sources of ignition and ventilate area. Stop leak if it Leak can be done without risk. Personnel cleaning up the spill should

Procedures: wear appropriate personal protective equipment, including respirators if vapor concentrations are high. Soak up spill with an inert absorbent such as sand, earth or other non-combusting material. Put absorbent material in covered, labeled metal containers. Prevent

liquid from entering watercourses, sewers and natural waterways. Report releases to authorities as required. See Section 13 for

disposal information.

SECTION 7 HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors

or mists. Use with adequate ventilation (equivalent to outdoors). Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep product away from heat, sparks, flames and all other

sources of ignition. No smoking in storage or use areas. Keep

containers closed when not in use.

Storage: Store in a cool, dry, well-ventilated area away from incompatible

materials. Keep containers closed when not in use.

Other: "Empty" containers retain product residue and can be hazardous.

Follow all MSDS precautions in handling empty containers. Do not cut

or weld on or near empty or full containers.

# SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Open doors & windows. Provide ventilation capable of maintaining

emissions at the point of use below recommended exposure limits. If used in enclosed area, use exhaust fans. Exhaust fans should be explosion-proof or set up in a way that flammable concentrations of

solvent vapors are not exposed to electrical fixtures or hot

surfaces.

Respiratory For operations where the exposure limit may be exceeded, a NIOSH

Protection: approved organic vapor respirator or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and good

industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Skin Rubber gloves are suitable for normal use of the product. For long

Protection: exposures chemical resistant gloves may be required such as 4H(tm) or

Silver Shield(tm) to avoid prolonged skin contact.

SECTION 8 (Continued)

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Safety glasses with side shields or safety goggles. Eye

Protection:

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# Section 11 (Continued)

Sensitization: Carcinogenicity: None of the components are known to cause sensitization. None of the components are listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA. The National Toxicology Program has reported that exposure of mice and rats to tetrahydrofuran (THF) vapor levels up to 1800 ppm 6 hr/day, 5 days/week for their lifetime caused an increased incidence of kidney tumors in male rats and liver tumors in female mice. The significance of these findings for human health is unclear at this time, and may be related to "species specific" effects. ACGIH has classified cyclohexanone (CYH) and tetrahydrofuran as "A3," Confirmed Animal

Carcinogens with Unknown Relevance to Humans.

Mutagenicity:

Cyclohexanone has been positive in bacterial and mammalian assays. Acetone, methyl ethyl ketone and tetrahydrofuran are generally thought not to be mutagenic.

Reproductive Toxicity:

Methyl ethyl ketone and cyclohexanone have been shown to cause embryofetal toxicity and birth defects in laboratory animals. Tetrahydrofuran and acetone have been found to cause adverse Developmental effects only when exposure levels cause other toxic Effects to the mother.

Medical Conditions Aggravated By Exposure:

Persons with pre-existing skin, lung, kidney or liver disorders

may be at increased risk from exposure to this product.

#### SECTION 12

# ECOLOGICAL INFORMATION

This product is not expected to be toxic to aquatic organisms. Cyclohexanone: 96 hour LC50 values for fish is over 100 mg/l. Tetrahydrofuran: 96 hour LC50 fathead minnow: 2160 mg/L.

Methyl Ethyl Ketone: 96 hour LC50 for fish is greater than 100 mg/L.

VOC

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#### SECTION 14 TRANSPORT INFORMATION

DOT Less than 1 Liter (0.3 gal) Greater than 1 Liter (0.3 gal)

Proper Shipping Name: Consumer Commodity Flammable Liquid NOS

Hazard Class/Packing Group: ORM-D 3, PGII
UN/NA Number: None UN1993

Hazard Labels: None Flammable Liquid (Methyl Ethyl Ketone, Cyclohexanone)

IMDG

Proper Shipping Name: Flammable Liquid, N.O.S. Limited Quantity

Hazard Class/Packing Group: 3, II UN Number: UN1993

Label: None (Limited Quantities

are excepted
from labeling)

2004 North American Emergency Response Guidebook Number: 127 or 128

#### SECTION 15 REGULATORY INFORMATION

Hazard Category for Section Acute Health, Chronic Health, Flammable

311/312:

Section 302 Extremely This product does not contain chemicals regulated

Hazardous Substances (TPQ): under SARA Section 302.

Section 313 Toxic Chemicals: This product contains the following chemicals

subject to SARA Title III Section 313 Reporting

requirements:

Chemical CAS # % by wt.
Methyl Ethyl Ketone 78-93-3 25-80%

CERCLA 103 Reportable Spills of this product over the RQ (reportable

Quantity:

quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Methyl Ethyl Ketone (80% maximum) of 5,000 lbs, is 6,250 lbs. Many states have more stringent release reporting requirements. Report spills required under

federal, state and local regulations.

California Proposition 65: This product does not contain any chemicals subject

To California Proposition 65 regulation.

TSCA Inventory: All of the components of this product are listed on

the TSCA inventory.

Canadian WHIMS Classification: Class B, Division 2; Class D, Division 2,

Subdivision B; Class D, Division 2, Subdivision A. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the

information required by the CPR.

# SECTION 16 OTHER INFORMATION

NFPA and HMIS:

NFPA Hazard Signal: Health: 2 Flammability: 3 Reactivity: 1 Special: None

HMIS Hazard Signal: Health: 2\* Flammability: 3 Reactivity: 1 PPE: G

#### Disclaimer:

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