SECTION 4: HEALTH HAZARDS

Current OSHA PEL and ACGIH TLV: 8-hr. TWA : 200 ppm. 590 mg/m^3. STEL is 300 ppm. (885 mg/m^3)
NIOSH (1978) proposed a 10-hr. TWA of 200 ppm.

- Human, Inhalation, TCLo: 300 ppm (peripheral nervous system)
- Rat, Oral, LD_{50}: 3.4g/kg
- Rabbit, Skin, LD_{50}: 13g/kg

- Below the TLV, inhalation of vapors may cause some irritation to the nose and throat. Above the TLV, irritation of the mucous membranes, headache, dizziness, upset stomach, and vomiting can occur. Inhalation may cause parestresies (tingling of the skin) and/or sensation of numbness in extremities. At high concentrations, MEK can produce unconsciousness.

- Skin contact with liquid will defat and irritate the skin and can produce dermatitis.

- Eye contact may cause irritation and burning sensations of the eyelid.

- Ingestion can irritate the digestive tract; ingestion of several ounces can cause narcosia.

- Methyl ethyl ketone has not been identified as a known or suspected carcinogen by the NTP, IARC, or OSHA.

SECTION 5: FIRST AID PROCEDURES

Eye contact:
- Flush eyes promptly with plenty of running water for at least 15 minutes, including under the eyelids.
- Get prompt medical attention.*

Skin contact:
- Promptly irrigate with running water.
- Wash exposed areas of skin with soap and water. Remove contaminated clothing promptly.
- Get medical attention if irritation persists.*

Inhalation:
- Remove victim to fresh air; restore and/or support breathing as necessary. Keep victim warm and at rest.
- Get prompt medical attention.*

Ingestion:
- Get prompt medical attention.*
- Give several glasses of milk or water to drink. Induce vomiting -- but ONLY if victim is conscious and alert.
- Never give anything by mouth to a person who is unconscious or convulsing.

** Get medical help (in school, paramedic, or community), for further treatment , observation, and support after first aid.**

SECTION 6: FIRE PROCEDURES AND DATA

- This volatile liquid can readily form explosive or flammable mixtures with air.
- OSHA Class IB flammable liquid. Remove container from fire area if safe to do so.
- Extinguishing media: carbon dioxide, dry chemical or alcohol type of foam. Water may be ineffective.
- For major fires, or if large quantites of this material are involved, fire fighters should wear appropriate protective clothing and use respiratory protection. Self-contained breathing apparatus is recommended.
- Use of a direct water stream may scatter fire.
- A water spray may be used to cool fire-exposed containers and disperse vapors.
- The heavier-than-air vapors may flow along surfaces to distant sources of ignition and "flash back."

FLASH POINT AND METHOD(S) ... 20°F (-6.7°C) (CC)
AUTOIGNITION TEMPERATURE ... 960°F (516°C)

FLAMMABILITY LIMITS IN AIR (vol. %) :
Lower ... 1.8 **Upper ...** 10.0

SECTION 7: PHYSICAL DATA

BOILING POINT (@ 1 atm.) ... 176°F, (80°C)
ABSOLUTE VISCOSITY (@ 25°C) ... 0.40 cp
VAPOR PRESSURE (@ 25°C, mm Hg) ... 100
VAPOR DENSITY (air=1) ... 2.5
SOLUBILITY IN WATER (@ 20°C) (wt.%) ... 27.1
SPECIFIC GRAVITY (20°/4°C) ... 0.805
% VOLATILE ... ca 100
FORMULA WEIGHT...72.12
EVAPORATION RATE (Diethyl Ether = 1) ... 2.7

DATA SOURCES: Genium Industrial MSDS #303 (9/79) and references 2-9, 12, 19-21, 23, 26, 27, 82, 501, 506, 509-11, 518.
(see glossary for titles)

F Sup

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