

**MATERIAL SAFETY DATA SHEET****Product Name:** Ethyl Methyl Ketone**CAS No.:** 78-93-3**Version:** 0**1. Identification**

**Product Code** : 90022, 90163, 90407  
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**2. Hazards Identification****Hazard classification**

Flammable liquids : Category 2  
Eye irritation : Category 2  
Specific target organ toxicity - single exposure : Category 3

**Label elements****Hazard symbol**

**Signal word** : Danger

**Hazard statement** : Highly flammable liquid and vapour.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.

**Precautionary statement** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
In case of fire: Use dry powder or dry sand to extinguish. Store in a well-ventilated place. Keep cool. Call a POISON CENTER or doctor/ physician.

**Supplemental Hazard Statements** : Repeated exposure may cause skin dryness or cracking.

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<b>Ingredient</b>	<b>CAS No</b>
Ethyl Methyl Ketone	78-93-3

**4. First Aid Measures****Description of first aid measures****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**Inhalation**

: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin contact**

: Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**Eye contact**

: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Swallowed**

: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed**

: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed Treatment**

: No data available

**5. Fire fighting measures****Extinguishing media****Suitable extinguishing media**

: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

: Carbon oxides  
Flash back possible over considerable distance, Container explosion may occur under fire conditions.

**Advice for firefighters**

: Wear self contained breathing apparatus for firefighting if necessary

**Further information**

: Use water spray to cool unopened containers.

**MATERIAL SAFETY DATA SHEET****Product Name:** Ethyl Methyl Ketone**CAS No.:** 78-93-3**Version:** 0**6. Accidental Release Measures**

- Personal precautions, protective equipment and emergency procedures** : Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Environmental precautions** : Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- Methods and materials for containment and cleaning up** : Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations
- Reference to other sections** : For disposal see section 13.

**7. Handling and Storage**

- Precautions for safe handling** : Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
- Conditions for safe storage, including any incompatibilities** : Store under inert gas. Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- Specific end use(s)** : No data available

**8. Exposure Controls Personal Protection****Control parameters****Components with workplace control parameters****Exposure controls**

- Appropriate engineering controls** : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

- Eye/face protection** : Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin Protection Hand protection**

- : Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws

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- Body Protection** : and good laboratory practices. Wash and dry hands.  
: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace..
- Respiratory protection** : Respiratory protection is required.

**9. Physical and Chemical Properties**

- Appearance** : Liquid  
**Odor** : No data available  
**pH** : No data available  
**Melting point/freezing point** : -87 °C  
**Initial boiling point and boiling range** : 80 °C - lit.  
**Flash Point** : -3 °C - closed cup  
**Vapor pressure** : 95 h Pa at 20 °C  
**Vapor density** : 2.49 - (Air = 1.0)  
**Relative density** : 0.805 g/mL at 25 °C  
**Solubility in water** : soluble  
**Solubility (other)** : No data available  
**Formula** : C<sub>4</sub>H<sub>8</sub>O  
**Molecular Weight** : 72.11 g/mol

**10. Stability and Reactivity**

- Reactivity** : No data available  
**Chemical stability** : Stable under recommended storage conditions.  
**Possibility of hazardous reactions** : No data available  
**Conditions to avoid** : Heat, flames and sparks. Extremes of temperature and direct sunlight.  
**Incompatible materials** : Oxidizing agents, Strong reducing agents  
**Hazardous decomposition products** : No data available

**11. Toxicological Information****Information on toxicological effects**

- Acute toxicity** : LD50 Oral - Rat - 2.737 mg/kg  
LC50 Inhalation - Mouse - 4 h - 32.000 mg/m<sup>3</sup>  
LC50 Inhalation - Mammal - 38.000 mg/m<sup>3</sup>  
LD50 Dermal - Rabbit - 6.480 mg/kg
- Skin corrosion/irritation** : No irritation

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- Serious eye damage/eye irritation** : Moderate eye irritation
- Respiratory or skin sensitization** : No data available
- Germ cell mutagenicity** : Laboratory experiments have shown mutagenic effects.
- Carcinogenicity** : No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- Reproductive toxicity** : Reproductive toxicity - Rat - Inhalation  
Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).
- Specific target organ toxicity - single exposure** : May cause drowsiness or dizziness.
- Specific target organ toxicity - repeated exposure** : No data available.
- Aspiration hazard** : No data available
- Signs and Symptoms of Exposure** : To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**12. Ecological Information**

- Toxicity** : Toxicity to fish mortality NOEC - *Cyprinodon variegatus* (sheepshead minnow) - 400 mg/l - 96 h  
LC50 - *Pimephales promelas* (fathead minnow) - 3.130 - 3.320 mg/l - 96 h  
Toxicity to daphnia and other aquatic invertebrates  
LC50 - *Daphnia magna* (Water flea) - > 520 mg/l - 48 h  
EC50 - *Daphnia magna* (Water flea) - 7.060 mg/l - 24 h
- Persistence and degradability** : No data available.
- Bioaccumulative potential** : No data available.
- Mobility in soil** : No data available.
- Other adverse effects** : No data available.

**13. Disposal consideration**

- Disposal instructions** : Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.
- Contaminated packaging** : Dispose of as unused product.

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	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
<b>DOT</b>	1193	ETHYL METHYL KETONE	3	II	NO
<b>IMDG</b>	1193	ETHYL METHYL KETONE	3	II	NO
<b>IATA</b>	1193	ETHYL METHYL KETONE	3	II	NO

**15. Regulatory Information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture  
No Data Available.

**16. Other Information****Issue Date :01/08/2014****Version : 0**

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