

SAFETY DATA SHEET

Methyl Ethyl Ketone

1 – IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

PRODUCT NAME: **Randolph Methyl Ethyl Ketone**
PRODUCT NUMBER: 25-MEK
RECOMMENDED USE: Aircraft coatings and cleaners
RESTRICTIONS ON USE: Not applicable
SUPPLIER: Poly-Fiber, Inc.
P.O. Box 3129, Riverside, CA 92519, USA
4343 Fort Drive, Riverside, CA 92509, USA
(951) 684-4280
(951) 809-7144
(760) 782-1947
EMERGENCY TELEPHONE: (800) 424-9300 (Chemtrec- US)
(703) 527-3887 (International – Call Collect)

2 - HAZARDS IDENTIFICATION

GHS Hazard Category

Flammable liquid- Category 2
Eye Irritation - Category 2A
Skin Irritation- Category 2
Respiratory Irritation- Category 3
Specific target organ toxicity (single exposure) – Category 3, Central Nervous System H336

Label Elements

Pictograms



Signal Word

DANGER

Hazard Statements

Highly flammable. Irritating to eyes and skin
May cause drowsiness or dizziness
Harmful: danger of serious damage to health by prolonged exposure through inhalation
Possible risk of harm to the unborn child
Harmful: may cause lung damage if swallowed

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Store in a well-ventilated place. Keep container tightly closed. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors/spray. Use only outdoors or in a well-ventilated area. Vapors may cause drowsiness and dizziness.

Response

INHALATION:

Move the victim to a fresh air place immediately. Get medical attention if discomforts persist.

INGESTION:

Rinse mouth with clean water immediately. DO NOT induce vomiting. Get medical attention immediately. If vomiting occurs, keep the victim's head low so that vomits from the stomach will not enter the lungs.

SKIN CONTACT:

Remove contaminated clothing and flush the affected skin areas with clean water for at least 15 minutes. Get medical attention if discomforts persist.

EYES CONTACT:

Make sure all contact lenses are removed before flushing the eyes with eye lids open with clean water for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

Storage

Store in a well-ventilated Place. Keep container tightly closed. Keep cool. Store in a locked cabinet, cage or room.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

CLASSIFICATION (1999/45) Xi, F, R11, R36, R66, R67

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

3 – COMPOSITION /INFORMATION ON INGREDIENTS

Name	EC No.	CAS No.	Content %	Classification (67/548/EEC)
Methyl Ethyl Ketone	201-159-0	78-93-3	50-100%	Xi, F, R11, R36, R66, R67, S6, S9

The Full Text for all R-Phrases and S-Phrases is displayed in Section 15

COMPOSITION COMMENTS

The data shown are in accordance with the latest EC Directives.

4- FIRST AID MEASURES**INHALATION:**

Move the victim to a fresh air place immediately. Get medical attention if discomforts persist.

INGESTION:

Rinse mouth with clean water immediately. DO NOT induce vomiting. Get medical attention immediately. If vomiting occurs, keep the victim's head low so that vomits from the stomach will not enter the lungs.

SKIN CONTACT:

Remove contaminated clothing and flush the affected skin areas with clean water for at least 15 minutes. Get medical attention if discomforts persist.

EYES CONTACT:

Make sure all contact lenses are removed before flushing the eyes with eye lids open with clean water for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

5- FIRE FIGHTING PROCEDURES**EXTINGUISHING MEDIA:**

Fire can be extinguished by using Foam, carbon dioxide, or dry powder Dry Chemicals, sand, dolomite, etc...

SPECIAL FIREFIGHTING PROCEDURES:

Do not use a direct stream of water. Product may float and can be reignited on the surface of the water. Do not enter a confined area without full bunker gear including a positive-pressure NIOSH-approved self-contained breathing apparatus. Decomposition products may form toxic materials.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Never use welding or cutting torch on or near drum (even empty) because residue or product can ignite explosively. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, flames and other ignition sources at locations distant from the material handling point. Flammable material.

6-ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Wear protective clothing as described in Section 8.

ENVIRONMENTAL PRECAUTIONS:

Spillages or uncontrolled discharges into watercourses must immediately be alerted to Environmental Agency or other appropriate regulatory authority.

SPILL CLEANUP METHODS:

Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, open flames, and smoking. Ventilate. Absorb in vermiculite, dry sand, or earth and place into containers for disposal.

7-HANDLING AND STORAGE**USAGE PRECAUTIONS:**

Keep away from heat, sparks and open flames. Avoid spilling, skin and eyes contact. Use with adequate ventilation and avoid excessive exposure to solvent vapors. Use approved respirator if air contamination exceeds the accepted level.

STORAGE PRECAUTIONS:

FLAMMABLE/Combustible. Keep away from oxidizers, open flames and other ignition sources. Keep unused contents in original container and tightly closed lids. Store in a cool, dry and well-ventilated place and at an ambient Temperature not to exceeding above 120°F.

STORAGE CLASS:

FLAMMABLE liquid storage.

8-EXPOSURE CONTROL/PERSONAL PROTECTION

Name	Workplace Exposure Limits	Remarks
Methyl Ethyl Ketone	ACGIH: 200ppm TWA; 300ppm STEL NIOSH: 200ppm TWA; 590 mg/m ³ TWA; 3000ppm IDLH OSHA –Final PELs: 200ppm TWA; 590 mg/m ³ TWA	Consult local authorities for acceptable exposure limits.

**PROTECTIVE EQUIPMENTS:****PROCESS CONDITIONS:**

Provide eyewash station.

ENGINEERING MEASURES:

Provide adequate ventilation. Fully equipped spray booth is recommended to ensure the workers legal exposure limits are not exceeded.

RESPIRATORY EQUIPMENT:

Wear respirator with appropriate cartridge for organic solvents and chemicals.

HANDPROTECTION:

Wear approved gloves such as Neoprene, Nitrile or Rubber types.

EYE PROTECTION:

Wear splash-proof goggles.

OTHER PROTECTION:

Wear appropriate clothing to prevent any possible skin contact.

HYGIENE MEASURES:

DO NOT SMOKE IN THE WORK AREA. Wash at the end of each work shift and before eating, drinking or smoking. Promptly remove contaminated clothing.

9- PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	liquid
COLOR:	colorless
ODOR:	sweetish odor - alcohol-like
BOILING POINT:	135-175° F
RELATIVE DENSITY:	0.807 g/mL
VAPOR DENSITY:	Heavier than air
FLASH POINT:	23.0 °F (Closed Cup)
FLAMMABILITY LIMITS:	1.4 % (Lower) – 11.4% (Upper)
SOLUBILITY VALUE (g/100g H ₂ O @ 20°C):	Insoluble
VOLATILE ORGANIC COMPOUND	

(VOC): 806 g/L

10- STABILITY AND REACTIVITY

STABILITY:

Stable

CONDITIONS TO AVOID:

Heat and fires. Ignition sources.

INCOMPATIBILITY (MATERIALS TO AVOID):

Strong alkalines or strong oxidizers. This material may dissolve some plastics, rubber compounds or coatings. May react strongly with acids while in liquid form.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Hydrogen chloride and very small amounts of phosgene and chlorine.

HAZARDOUS POLYMERIZATION:

N/A

11-TOXICOLOGICAL INFORMATION

Methyl Ethyl Ketone (CAS# 78-93-3): Draize test, rabbit, skin: 500 mg/24H Moderate; Draize test, rabbit, skin: 402 mg/24H Mild; Inhalation, mouse: LC50 = 32 gm/m³/4H; Inhalation, rat: LC50 = 23500 mg/m³/8H; Oral, mouse: LD50 = 4050 mg/kg; Oral, rat: LD50 = 2737 mg/kg; Skin, rabbit: LD50 = 6480 mg/kg;

Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.

Teratogenicity: Embryo or Fetus: fetotoxicity, ihl-rat TCLo=1000 ppm. Specific Developmental Abnormalities: craniofacial and urogenital, ihl-rat TCLo=3000 ppm/7H; musculoskeletal, ihl-rat TCLo=1000 ppm.

Reproductive Effects: No information available.

Neurotoxicity: No information available.

Mutagenicity: Sex chromosome loss/non-disjunction: *S. cerevisiae* 33800 ppm.

Other Studies: See actual entry in RTECS for complete information.

12- ECOLOGICAL INFORMATION

Methyl Ethyl Ketone (CAS#78-93-3): Ecotoxicity : Fish/Fathead Minnow/LC50 = 3220mg/l; Environmental : Substance evaporates in water with T1/2=3D (rivers) to 12D (lakes); Physical : Substance photo degrades in air with T1/2=2.3 days.

13 – DISPOSAL CONSIDERATIONS

Hazardous wastes should be sent to a RCRA approved incinerator or disposed of in a RCRA approved waste facility. Dispose of container and unused contents in accordance with federal, state and local requirements.

I certify that all chemical substances in this shipment comply with all applicable rules or orders under TSCA and that I am not offering a chemical substance for entry in violation of TSCA or any applicable rule or order under TSCA.

14 – TRANSPORT INFORMATION

DOT / ADR / RID Classification:**DOT PROPER SHIPPING NAME: METHYL ETHYL KETONE****PRIMARY HAZARD CLASS/DIVISION: 3****UN/UA NUMBER: UN1193****PACKING GROUP: II****IMDG and ADN Classification:****IMDG PROPER SHIPPING NAME: METHYL ETHYL KETONE****IMDG UN CLASS: 3****IMDG UN NUMBER: 1263****IMDG PACKING GROUP: II****IMDG LABEL: FLAMMABLE LIQUID****IMDG VESSEL STOWAGE: B**

Air shipping this product is not advised and if done must be handled by a certified carrier according to IATA rules.



GHS LABEL:

DANGER

HIGHLY FLAMMABLE LIQUID AND VAPOR. VAPOR HARMFUL. CAUSES SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL OR FATAL IF SWALLOWED AND ENTERS AIRWAYS.

Refer to MSDS for additional information on safe handling / use. - Keep out of reach of children. For Industrial Use Only.

Contains: Methyl Ethyl Ketone (100%). This product contains one or more chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm.

Hazards: H225: Highly flammable liquid and vapour. H301+H311+H331: Toxic if swallowed, in contact with skin or if inhaled. H370: Causes damage to organs.

Precautionary Statement(s): P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P280: Wear protective gloves/protective clothing/eye protection/face protection. P260: Do not breathe mist/vapours/spray. P271: Use only outdoors or in a well-ventilated area. P240: Ground/bond container and receiving equipment.

First Aid: Inhalation - Move person to fresh air. If symptoms occur obtain medical attention. **Skin Contact** - Wash affected skin with soap and water. If symptoms occur obtain medical attention. **Eye Contact** - If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. If symptoms occur obtain medical attention. **Ingestion** - Do not induce vomiting. Drink one glass of water. If symptoms occur obtain medical attention.

15 – REGULATORY INFORMATION



Does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

www.P65Warnings.ca.gov

Hazards: H225: Highly flammable liquid and vapour. H301+H311+H331: Toxic if swallowed, in contact with skin or if inhaled. H370: Causes damage to organs.

Precautionary Statement(s): P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P280: Wear protective gloves/protective clothing/eye protection/face protection. P260: Do not breathe mist/vapours/spray. P271: Use only outdoors or in a well-ventilated area. P240: Ground/bond container and receiving equipment.

CODES:



XI



F

- Xi=irritant
- F=highly flammable

R-Phrases:

- R11: Highly Flammable
- R36: Irritating to eyes
- R66: Repeated exposure may cause skin dryness or cracking
- R67: Vapors may cause drowsiness and dizziness

S-Phrases:

- S9: Keep container in a well-ventilated place
- S16: Keep away from sources of ignition - No smoking

16- DISCLAIMER

Above information is based on data supplied to us and is believed to be correct. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since the data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.