



Methyl Ethyl Ketone 20019 IMP-3601 1/5/15/53 gallon

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

## Company

Refinish Distributors Alliance  
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Scottsdale, AZ 85259  
1-480-661-8799

Emergency Telephone Number: 1-800-424-9300 CHEMTREC

Product name METHYL ETHYL KETONE  
Product code 20019  
Product Use Description No data**2. HAZARDS IDENTIFICATION****Emergency Overview**

Appearance: liquid,, Colorless

CAUTION! FLAMMABLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY BE HARMFUL IF INHALED OR SWALLOWED. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN, CAUSE IRRITATION AND BURNS.

**Potential Health Effects****Routes of exposure**

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

**Eye contact**

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

**Skin contact**

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

**Ingestion**

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

**Inhalation**

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

**Aggravated Medical Condition**



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Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions)

#### Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness)

#### Target Organs

Based on animal studies, exposure to methyl ethyl ketone (MEK) increases the onset of peripheral neuropathy caused by exposure to methyl butyl ketone (MBK), and/or n-hexane, and/or ethyl butylketone. MEK alone has not been shown to cause peripheral neuropathy. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects

#### Carcinogenicity

Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

#### Reproductive hazard

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
METHYL ETHYL KETONE	78-93-3	<=100%

### 4. FIRST AID MEASURES

#### Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

#### Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

#### Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

#### Inhalation

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If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**Notes to physician**

**Hazards:** This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

**Treatment:** No information available.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Foam, Water spray, Carbon dioxide (CO<sub>2</sub>), Dry chemical

**Hazardous combustion products**

carbon dioxide and carbon monoxide

**Precautions for fire-fighting**

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Water may be ineffective for extinguishment unless used under favorable conditions by experienced fire fighters. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

**Flammability Class for Flammable Liquids**

Flammable Liquid Class IB

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions**

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Ensure adequate ventilation.

**Environmental precautions**

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

**Methods for cleaning up**

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

**Other information**

Comply with all applicable federal, state, and local regulations.

**7. HANDLING AND STORAGE**



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**Handling**

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

**Storage**

Store in a cool, dry, ventilated area. Keep containers closed when not in use.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

METHYL ETHYL KETONE		78-93-3
ACGIH	time weighted average	200 ppm
ACGIH	Short term exposure limit	300 ppm
NIOSH	Recommended exposure limit (REL):	200 ppm
NIOSH	Recommended exposure limit (REL):	590 mg/m3
NIOSH	Short term exposure limit	300 ppm
NIOSH	Short term exposure limit	885 mg/m3
OSHA Z1	Permissible exposure limit	200 ppm
OSHA Z1	Permissible exposure limit	590 mg/m3

**General advice**

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

**Exposure controls**

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

**Eye protection**

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

**Skin and body protection**

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Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves (consult your safety equipment supplier).

Discard gloves that show tears, pinholes, or signs of wear.

**Respiratory protection**

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state</b>	liquid
<b>Form</b>	No data
<b>Colour</b>	Colorless
<b>Odour</b>	characteristic, pleasant, acetone-like
<b>Boiling point/boiling range</b>	79.60 °C / 175.3 °F
<b>Melting point/range</b>	-123 °F / -86 °C
<b>pH</b>	No data
<b>Flash point</b>	16 °F / -9 °C, Closed Cup
<b>Evaporation rate</b>	5.70 (n-Butyl Acetate)
<b>Explosion limits</b>	1.8 %(V) 10 %(V)
<b>Vapour pressure</b>	12.13 kPa @ 77 °F / 25 °C
<b>Vapour density</b>	2.41 (AIR=1)
<b>Density</b>	0.806 g/cm <sup>3</sup> @ 68.00 °F / 20.00 °C 6.71 lb/gal @ 68 °F / 20 °C
<b>Solubility</b>	partly soluble in water
<b>Partition coefficient: n-octanol/water</b>	No data
<b>log Pow</b>	0.29
<b>Autoignition temperature</b>	759 °F / 404 °C

**10. STABILITY AND REACTIVITY****Stability**

Stable.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible products**

Copper, Copper alloys, strong alkalis, Strong oxidizing agents, strong mineral acids, Amines

**Hazardous decomposition products**

carbon dioxide and carbon monoxide



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**Hazardous reactions**

Product will not undergo hazardous polymerization.

**Thermal decomposition**

No data

**11. TOXICOLOGICAL INFORMATION****Acute oral toxicity**

METHYL ETHYL KETONE	LD 50 Mouse: 670 mg/kg LD 50 Rat: 2,300 - 3,500 mg/kg
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**Acute inhalation toxicity**

METHYL ETHYL KETONE	LC 50 Rat: 11,700 mg/l , LC 50 Mouse: 11,000 mg/l , LC 50 Rat: 11,700 mg/l , 4 h
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**Acute dermal toxicity**

METHYL ETHYL KETONE	LD 50 Rabbit: > 8,000 mg/kg LD 50 Rabbit: > 5 g/kg
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**12. ECOLOGICAL INFORMATION****Aquatic toxicity****Acute and Prolonged Toxicity to Fish**

No data

**Acute Toxicity to Aquatic Invertebrates**

No data

**Environmental fate and pathways**

No data

**13. DISPOSAL CONSIDERATIONS****Waste disposal methods**

Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

**14. TRANSPORT INFORMATION****IMDG:**

UN1193, METHYL ETHYL KETONE 3, II

**IATA\_P:**

UN1193, Methyl ethyl ketone 3, II



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**IATA\_C:**

UN1193, Methyl ethyl ketone 3, II

**CFR\_ROAD:**

UN1193, Methyl ethyl ketone 3, II

**CFR\_RAIL:**

UN1193, Methyl ethyl ketone 3, II

**CFR\_INWTR:**

UN1193, Methyl ethyl ketone 3, II

**IMDG\_ROAD:**

UN1193, METHYL ETHYL KETONE 3, II

**IMDG\_RAIL:**

UN1193, METHYL ETHYL KETONE 3, II

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**15. REGULATORY INFORMATION**

**California Prop. 65**

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

**SARA Hazard Classification**

Fire Hazard  
Acute Health Hazard

**SARA 313 Component(s)**

**Reportable quantity - Product**

US. EPA CERCLA Hazardous Substances (40 CFR 302) 5000 lbs

**Reportable quantity - Components**

METHYL ETHYL KETONE 78-93-3 5000 lbs

	Health	Flammability	Reactivity	Other
<b>HMIS</b>	1	3	0	
<b>NFPA</b>	1	3	0	

**16. OTHER INFORMATION**

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.