

PACKAGING SERVICE CO., INC.

DATE: 12/29/00

PRODUCT IDENTITY: CROWN METHYL ETHYL KETONE (MEK SOLVENT)

PAGE 1 OF 7

NEW MSDS DATE: 12/29/2000

### MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1.

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)

IMPORTANT: Read this MSDS before handling & disposing of this product.

Pass this information on to employees, customers, & users of this product.

#### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT IDENTITY: CROWN METHYL ETHYL KETONE (MEK SOLVENT)

COMPANY IDENTITY: PACKAGING SERVICE CO., INC.

COMPANY ADDRESS: 1904 MYKAWA ROAD / P O Box 875

COMPANY CITY: PEARLAND, TX 77581

COMPANY PHONE: 1-281-485-1458

CHEMTREC PHONE: 1-800-424-9300

PRODUCT INFO: 1-800-246-5055 Mon-Fri 9am to 5pm (PST)

#### SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CONTAINS: 95-100%METHYL ETHYL KETONE (78-93-3)[ 201-159-0]

Number in parentheses is CAS #, number in brackets is European EC #.

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#### SECTION 3. HAZARDS IDENTIFICATION

##### RISK STATEMENTS:

R11 Flammable

R36/37/38 Irritating to eyes, respiratory system and skin.

Can cause lung damage and may be fatal if swallowed.

May cause CNS depression.

##### SAFETY STATEMENTS:

S9 Keep container in a well-ventilated place.

S16 Keep away from sources of ignition. No smoking.

#### SECTION 4. FIRST AID MEASURES

**EYE CONTACT:**

For eyes, flush with plenty of water for 15 minutes & get medical attention.

**SKIN CONTACT:**

In case of contact with skin immediately remove contaminated clothing. Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

**INHALATION:**

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped give artificial respiration.

**SWALLOWING:**

If swallowed, CALL A PHYSICIAN IMMEDIATELY! Induce vomiting promptly using physician's instructions or by having patient stick finger down throat. Never give anything by mouth to an unconscious person.

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#### SECTION 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:**

NFPA Class B extinguishers (Carbon Dioxide or foam) for Class I B liquid fires.

**SPECIAL FIRE FIGHTING PROCEDURES:**

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

**UNUSUAL EXPLOSION AND FIRE PROCEDURES:**

**FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE**

Keep container tightly closed.  
Isolate from oxidizers, heat, sparks, electric equipment & open flame.  
Closed containers may explode if exposed to extreme heat.  
Applying to hot surfaces requires special precautions.  
Empty container very hazardous! Continue all label precautions!

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

**CONTAINMENT TECHNIQUES:**

Stop spill at source. Dike area & contain.

**CLEAN-UP PROCEDURES:**

Clean up remainder with absorbent materials. Mop up & dispose of. Persons without proper protection should be kept from area until cleaned up.

**SECTION 7. HANDLING AND STORAGE**

**HANDLING:**

Isolate from oxidizers, heat, sparks, electric equipment & open flame.  
Use only with adequate ventilation. Avoid breathing of vapor or spray mist.  
Avoid contact with skin & eyes.  
Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier.  
Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.  
Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, saw, drill, braze, or weld. Empty container very hazardous! Continue all label precautions!

**STORAGE:**

Do not store above 49 C/120 F. Store large amounts in structures made for OSHA Class I B liquids.  
Keep container tightly closed & upright when not in use to prevent leakage.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**EXPOSURE CONTROLS:**

Ventilate to keep vapors of this material below 100 ppm.  
If over TLV, in accordance with 29 CFR 1910.134, use NIOSH approved positive-pressure self-contained breathing apparatus.  
Consult Safety Equipment Supplier. Use explosion-proof equipment.

**VENTILATION:**

LOCAL EXHAUST : Necessary  
MECHANICAL (GENERAL) : Acceptable  
SPECIAL : None  
OTHER : None

**PERSONAL PROTECTIONS:**

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier.  
Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

**WORK & HYGIENIC PRACTICES:**

Provide readily accessible eye wash stations & safety showers.  
Wash at end of each workshift & before eating, smoking or using the toilet.  
Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

**SECTION 9. PHYSICAL DATA**

APPEARANCE: Liquid, Water-White  
 ODOR: Ketone  
 BOILING RANGE: 77 79 81 C / 172 175 178 F  
 AUTO IGNITION TEMPERATURE: 458 C / 858 F (Lowest Component)  
 LOWER FLAMMABLE LIMIT IN AIR (% by vol): 1.8  
 FLASH POINT (TEST METHOD): -4 C / 24 F (TCC)  
 FLAMMABILITY CLASSIFICATION: Class I B  
 GRAVITY @ 60 F:  
     API: 44.3  
     SPECIFIC GRAVITY (Water=1): .805  
     POUNDS/GALLON: 6.706  
 VOC'S (>0.44 Lbs/Sq In): 100.1 Vol. % / 806.0 g/L / 6.713 Lbs/Gal  
 TOTAL VOC'S (TVOC): 100.0 Vol. % / 805.0 g/L / 6.705 Lbs/Gal  
 NONEXEMPT VOC'S (CVOC): 100.0 Vol. % / 805.0 g/L / 6.705 Lbs/Gal  
 HAZARDOUS AIR POLLUTANTS (HAPS): 100.0 Wt. % / 805.0 g/L / 6.705 Lbs/Gal  
 VAPOR PRESSURE (mm of Hg)@20 C 70.0  
 NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C) 70.0  
 VAPOR DENSITY (air=1): 2.5  
 WATER ABSORPTION: Appreciable  
 REFRACTIVE INDEX: 1.379

**SECTION 10. STABILITY & REACTIVITY**

**STABILITY:**

Stable

**CONDITIONS TO AVOID:**

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

**MATERIALS TO AVOID:**

Isolate from strong oxidizers such as permanganates, chromates & peroxides.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Carbon Monoxide, Carbon Dioxide from burning.

**HAZARDOUS POLYMERIZATION:**

Will not occur.

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**SECTION 11. TOXICOLOGICAL INFORMATION**

| MATERIAL  | CAS #   | TWA (OSHA) | TLV (ACGIH) | HAP |
|---|---------|------------|-------------|-----|
| Methyl Ethyl Ketone   | 78-93-3 | 200 ppm    | 200 ppm     | Yes |
| Each component showing 'Yes' under "HAP" is an EPA Hazardous Air Pollutant. |         |            |             |     |

PRODUCT IDENTITY: CROWN METHYL ETHYL KETONE (MEK)

PAGE 5 OF 7

NEW MSDS DATE: 12/29/2000

MEK001

**SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)**

| <b>MATERIAL</b>     | <b>CAS #</b> | <b>CEILING</b> | <b>STEL (OSHA/ACGIH)</b> |
|---------------------|--------------|----------------|--------------------------|
| Methyl Ethyl Ketone | 78-93-3      | None Known     | 300 ppm                  |

**ACUTE HAZARDS****EYE & SKIN CONTACT:**

Primary irritation to skin, defatting, dermatitis.

Primary irritation to eyes, redness, tearing, blurred vision.

Liquid can cause eye irritation. Wash thoroughly after handling.

**INHALATION:**

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful.

**SWALLOWING:**

Swallowing can cause abdominal irritation, nausea, vomiting &amp; diarrhea.

**SUBCHRONIC HAZARDS/CONDITIONS AGGREGATED****CONDITIONS AGGREGATED:**

Persons with severe skin, liver or kidney problems should avoid use.

**CHRONIC HAZARDS****CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:**

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

PRODUCT IDENTITY: CROWN METHYL ETHYL KETONE (MEK)

PAGE 6 OF 7

NEW MSDS DATE: 12/29/2000

**SECTION 12. ECOLOGICAL INFORMATION****MAMMALIAN INFORMATION:**

| <b>MATERIAL</b>     | <b>CAS #</b> | <b>LOWEST KNOWN LETHAL DOSE DATA</b> |
|---------------------|--------------|--------------------------------------|
|                     |              | <b>LOWEST KNOWN LD50 (ORAL)</b>      |
| Methyl Ethyl Ketone | 78-93-3      | 3400.0 mg/kg (Rats)                  |
| Methyl Ethyl Ketone | 78-93-3      | LOWEST KNOWN LC50 (VAPORS)           |
|                     |              | 2000 ppm (Rats)                      |
| Methyl Ethyl Ketone | 78-93-3      | LOWEST KNOWN LD50 (SKIN)             |
|                     |              | 12600.0 mg/kg (Rabbits)              |

**AQUATIC ANIMAL INFORMATION:**

The most sensitive known aquatic group to any component of this product is: Fish exposed to 5120 ppm or mg/L are adversely affected by components of this product. Keep out of sewers and natural water supplies.

**MOBILITY:**

This material is a mobile liquid.

**DEGRADABILITY:**

This product is completely biodegradable.

**ACCUMULATION:**

This product does not accumulate or biomagnify in the environment.

**SECTION 13. DISPOSAL CONSIDERATIONS**

Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws.

If questions exist, contact the appropriate agencies.

**SECTION 14. TRANSPORT INFORMATION**

**DOT SHIPPING NAME:** Methyl Ethyl Ketone, 3, UN1193, PG-II

"RQ," must be put before shipping name if in a container of over 5000 pounds.

DRUM LABEL: (FLAMMABLE LIQUID)  
 IATA / ICAO: Methyl Ethyl Ketone, 3, UN1193, PG-II  
 IMO / IMDG: Methyl Ethyl Ketone, 3, UN1193, PG-II  
 EMERGENCY RESPONSE GUIDEBOOK NUMBER: 127

MEK001

**SECTION 15. REGULATORY INFORMATION****EPA REGULATION:**

**SARA SECTION 311/312 HAZARDS:** Acute Health, Fire

All components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification

This product contains the indicated <\*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

PACKAGING SERVICE CO., INC.

DATE: 12/29/00

PRODUCT IDENTITY: CROWN METHYL ETHYL KETONE (MEK)

PAGE 7 OF 7

NEW MSDS DATE: 12/29/2000

MEK001

**SECTION 15. REGULATORY INFORMATION (CONTINUED)**

| <b>SARA TITLE III INGREDIENTS</b> | <b>CAS#</b> | <b>WT. % (REG. SECTION)</b> | <b>RQ (LBS)</b> |
|-----------------------------------|-------------|-----------------------------|-----------------|
| *Methyl Ethyl Ketone              | 78-93-3     | 100 (311,312,313,RCRA)      | 5000            |

IF > 5000 POUNDS OF THIS PRODUCT IS IN ONE CONTAINER THE "RQ" OF METHYL ETHYL KETONE IS EXCEEDED.

**STATE REGULATIONS:**

**THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN CALIFORNIA AQMD RULE 443.1 & SIMILAR REGULATIONS**

**INTERNATIONAL REGULATIONS:**

The components of this product are listed on the chemical inventories of the following countries:

Australia, Canada, Europe (EINECS), Japan, Korea, United Kingdom.

**SECTION 16. OTHER INFORMATION**

HAZARD RATINGS:  
HEALTH (NFPA): 1  
HEALTH (HMIS): 2  
FLAMMABILITY: 3  
REACTIVITY: 0

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

**EMPLOYEE TRAINING:**

Employees should be made aware of all hazards of this material (as stated in this MSDS) before handling it.

**NOTICE**

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.