## MATERIAL SAFETY DATA SHEET

Date-Issued: 12/26/2000 MSDS Ref. No: 217110 Date-Revised: 02/21/2001 Revision No: 1

**Methyl Ethyl Ketone** 

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Methyl Ethyl Ketone

PRODUCT DESCRIPTION: Methyl Ethyl Ketone

**PRODUCT CODE: 217110** 

PRODUCT FORMULATION NAME: Methyl Ethyl Ketone

CHEMICAL FAMILY: Ketone GENERIC NAME: 2-Butanone, MEK

#### **MANUFACTURER**

Americhem Sales Corporation 340 North Street

Mason, MI 48854

Contact: Americhem Sales Corporation Product Stewardship: 517-676-9363 Transportation: 517-676-9363

## 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC (U.S.):** (800) 424-9300

Canutec (613) 996-6666

**Emergency Phone:** 800-424-9300

# 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>
2-Butanone

Wt.% <u>CAS# EINECS#</u>
>99 78-93-3

## 3. HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW**

IMMEDIATE CONCERNS: Warning! Flammable liquid and vapor. High vapor concentrations may cause drowsiness and irritation of the eyes or respiratory tract. Prolonged or repeated skin contact may cause drying, cracking, or irritation.

#### POTENTIAL HEALTH EFFECTS

EYES: Severe irritation and discomfort. Reversible and/or irreversible corneal damage may occure.

SKIN: Moderate irritation and discomfort. Defatting of skin and redness are possible. Toxic systemic effects from absorbtion are expected to be minor.

INGESTION: May cause Nausea, Diarrhea, Vomitting, Inebriation (Drunkeness), Difficulty breathing, Headache, Coma

INHALATION: Dizziness, impaired coordination, headaches and loss of consciousness. Severe respiratory tract irritation. Toxic systemic effects are possible.

#### **CHRONIC:**

Prolonged or repeated exposure may cause the following effects: Dermatitis and skin defatting; conjuctivitis; inflammation of the respiratory tract, weakness, drowsiness; Liver and Kidney Damage; Clinical Neuropathy

**MEDICAL CONDITIONS AGGRAVATED:** Persons with Chronic respiratory or Skin diseases. Persons with a history of Peripheral Neuropathy.

**ROUTES OF ENTRY:** Absorption, Inhalation, Ingestion **TARGET ORGAN STATEMENT:** CNS depressent

## 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for 15 minutes. If irritation persists, seek medical attention.

**SKIN:** Remove contaminated clothing, wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention.

**INGESTION:** Do not Induce Vomiting. Get immediate medical attention.

**INHALATION:** Remove victim from area of exposure. If unconscious, give oxygen. Give artificial respiration if not breathing. Get immediate medical attention.

## 5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: (16°F) FLAMMABLE LIMITS: 1.4 to 11.4

**AUTOIGNITION TEMPERATURE:** (759°F)

**FLAMMABLE CLASS:** Treat as an OSHA Class IB Flammable liquid

**EXTINGUISHING MEDIA:** Foam, Dry Chemical, Carbon Dioxide, Water Fog

FIRE FIGHTING PROCEDURES: Treat as highly

flammable/explosive vapor solvent. Vapor is heavier than air and may

travel to ignition sources and flashback. Keep unignited containers cool with water. Contaminated fire control waters should be diked or collected in ponds if possible and disposed of properly. Use eye and skin protections and self-contained breathing apparatus.

**FIRE FIGHTING EQUIPMENT:** Respiratory and eye protection are required for fire fighting personnel. Full protective equipment (Bunker Gear) and self contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of a SCBA may not be required.

## 6. ACCIDENTAL RELEASE MEASURES

#### **SMALL SPILL:**

Extinguish all ignition sources and ventilate area. Evacuate all non-essential personnel. Blanket spill with alcohol resistant foam to limit evaporation. Dike area to contain spill and clean up by absorbing on inert absorbent or by other means. Liquid may be flammable even when mixed with water unless heavily diluted (>5:1). Do not flush into sewers or natural waterways.

#### **LARGE SPILL:**

Contain material as described above and call the local fire or police department for immediate emergency assistance.

## 7. HANDLING AND STORAGE

#### **HANDLING:**

Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel or container to another. This material can accumulate static charge by flow or agitation. Vapors can be ignited by static discharge. Use explosion proof equipment as directed by local fire codes.

#### **STORAGE:**

Store unopened containers under cool, dry and ventilated conditions. Keep away from heat, sparks and flame.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **EXPOSURE GUIDELINES:**

#### OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

#### **EXPOSURE LIMITS**

OSHA PEL ACGIH TLV Supplier OEL ppm mg/m³ ppm mg/m³ ppm mg/m³ ppm mg/m³

2-Butanone **TWA** 200 200

**STEL** 300

**ENGINEERING CONTROLS:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure guidelines, additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used.

#### PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields or goggles when handling this material.

SKIN: To prevent any contact, wear impervious protective clothing such as neoprene or butyl rubber gloves, apron, boots or whole bodysuit, as appropriate.

RESPIRATORY: Use NIOSH/MSHA approved respirators when vapors or mist concentrations exceed permissible exposure limits.

PROTECTIVE CLOTHING: Chemical resistant boots, apron, etc. as necessary to prevent contamination of clothing and skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid ODOR: Sweet, Pungent odor APPEARANCE: Clear COLOR: Colorless

pH: Not Available

**PERCENT VOLATILE: 100** 

VAPOR PRESSURE: 100 mmHg at 25°C

VAPOR DENSITY: 2.5 (Air=1) BOILING POINT: (176°F) FREEZING POINT: (-123°F)

**SOLUBILITY IN WATER:** Partially Soluble **EVAPORATION RATE:** 2.7 (n-Butyl Acetate=1) **SPECIFIC GRAVITY:** 0.81 (water=1) at 20°C

**MOLECULAR FORMULA:** C4H8O

MOLECULAR WEIGHT: 72.12 8018OML6

## 10. STABILITY AND REACTIVITY

**STABLE:** YES

**HAZARDOUS POLYMERIZATION: NO** 

**CONDITIONS TO AVOID:** Exposure to excessive heat, open flames and sparks. Avoid conditions that favor the formation of excessive mists and/or fumes.

**STABILITY:** Stable

POLYMERIZATION: Will not occur

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of

Carbon when burned.

**INCOMPATIBLE MATERIALS:** Strong oxidizing agents.

## 11. TOXICOLOGICAL INFORMATION

#### **ACUTE**

**DERMAL LD**<sub>50</sub>: 6400 mg/kg (rabbit)

**ORAL LD**<sub>50</sub>: 2737 mg/kg (rat)

**INHALATION LC**<sub>50</sub>: 23500 (mg/m3) Rat

#### **CARCINOGENICITY:**

IARC: Not listed by IARC NTP: Not listed by NTP. OSHA: Not listed by OSHA

### 12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data available. CHEMICAL FATE INFORMATION: No Data at this time.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Conditions of use may cause this material to become a hazardous waste as defined by state or federal law. Use approved treatment, transporters and disposal sites.

**EMPTY CONTAINER:** Keep containers closed when not in use. Do not reuse empty containers.

## 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)** 

**PROPER SHIPPING NAME:** Methyl Ethyl Ketone **PRIMARY HAZARD CLASS/DIVISION:** 3

UN/NA NUMBER: UN1193

PACKING GROUP: II LABEL: Flammable Liquid

## 15. REGULATORY INFORMATION

#### **UNITED STATES**

## SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: YES PRESSURE GENERATING: NO REACTIVITY: NO

**ACUTE: YES CHRONIC: NO** 

313 REPORTABLE INGREDIENTS: Yes - Methyl Ethyl Ketone

## CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

**CERCLA REGULATORY:** Sec. 103 - Yes; RQ = 5000 lbs.

CERCLA RQ: 5000 lbs.

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This material or its components are listed in

the TSCA inventory.

**PROPOSITION 65 STATEMENT:** Not Listed

## 16. OTHER INFORMATION

#### **REVISION SUMMARY**

Revision #: 1

This MSDS replaces the December 26, 2000 MSDS. Any changes in information are as follows:

In Section 1

Prepared By

#### **NFPA CODES**

**HEALTH: 2 FIRE: 3 REACTIVITY: 0** 

**HMIS CODES** 

**HEALTH: -2 FIRE: 3 REACTIVITY: 0 PROTECTION: X** 

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