

Material Identity: MEK

November 12, 2015

### **SECTION 1 · COMPANY AND PRODUCT IDENTIFICATION**

Manufacturers Address: Emergency Phone CHEMTREC: (800) 424-9300

1557 Marietta Road General Information: (404) 355-8220

Synonyms: Methyl Ethyl Ketone, Ethyl Methyl Ketone, 2-Butanone,

3-Butanone, methyl acetone

**Product Description: Solvent** 

### **SECTION 2- HAZARDS IDENTIFICATION**

**GHS Classification:** 

Atlanta, Georgia 30318

[ Health ] [ Environmental ] [ Physical ]

Eye irritation Category 2A Acute Aquatic Toxicity Category 2 Flammable Liquid Category 2

## GHS Label elements, including precautionary statements

**Pictograms** 





Signal Word: Danger

## Hazard statement(s)

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

## Precautionary statement(s)

P210: Keep away from heat/sparks/open flames/hot surfaces. -- No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell. P337 + P313: If eye irritation persists: Get medical advice/attention.

P370 + P378: In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish.P403 + P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.P501: Dispose of contents and container in accordance with local regulations.

## **SECTION 3 · COMPOSITION / INFORMATION ON INGREDIENTS**

CHEMICAL NAME CAS Number %WT

Methyl Ethyl Ketone 78-93-3 100



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November 12, 2015

### **SECTION 4 · FIRST AID MEASURES**

## **FIRST AID PROCEDURES:**

Eye Contact: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

Skin Contact: Wash with soap and water. Seek medical attention if irritation develops.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. Seek medical attention.

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

Seek medical attention if symptoms appear.

### **SECTION 5 · FIRE FIGHTING MEASURES**

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

Hazardous combustion products: Oxides of carbon and various hydrocarbons

**Fire Fighting Procedures:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Unusual Fire and Explosion Hazards:** Containers can build up pressure if exposed to heat and/or fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Vapors may form explosive mixture with air.

### SECTION 6 · ACCIDENTAL RELEASE and DISPOSAL MEASURES

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spills: Dike spill area to contain liquid. Salvage as much re-useable liquid as possible into a suitable container. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas. Be careful that the product is not present at a concentration level above TLV.

## **SECTION 7 · STORAGE AND HANDLING**

**Handling:** Avoid contact with skin and eyes. Do not breathe vapors or mists. Keep container closed and tightly sealed when not in use. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

**Storage:** This material is a static accumulator. Use non-sparking tools. Store in a cool, dry, ventilated area, away from incompatible substances. Store only in approved properly labeled containers. Containers should be grounded and bonded.

## SECTION 8 · EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Engineering Controls:** Provide explosion-proof ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below.

Exposure Limits: Methyl Ethyl Ketone 200 ppm ACGIH 300 ppm OSHA

### **Personal Protective Equipment (PPE):**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

**Skin:** If prolonged or repeated skin contact is likely, wear appropriate protective gloves.

**Clothing:** Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.

**Respirators:** Where adequate ventilation is not available an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard, 29 CFR 1920.134. In confined areas, use a self-contained breathing apparatus.



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### **SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES**

Flash Point: 27 °F Flammability Limits: Lower: 1 Upper: 10

**Autoignition Temperature:** 676 °F **Specific Gravity:** 0.805

**Boiling Point:** 176 °F **Volatile %:** 100

Melting Point/Freezing Point: -125 °F Evaporation Rate (Water=1): No available data

Vapor Pressure: 71 mmHg pH: Not Applicable

Vapor Density (Air-1): 2.5 Solubility in Water: 4.2 g/l

**Odor/Appearance:** Colorless liquid with penetrating odor.

### **SECTION 10 · STABILITY AND REACTIVITY**

Chemical Stability: Stable under normal use and temperature conditions.

Conditions to Avoid: Exposure to moisture. Heat, flames and sparks. Extremes of temperature and direct sunlight.

**Incompatible Materials:** Strong oxidizing agents, Strong reducing agents.

Hazardous Polymerization: Will not occur.

### **SECTION 11 · TOXILOGICAL INFORMATION**

## Signs and Symptoms of Overexposure:

Skin: Contact can cause defating, redness and irritation. Severity depends on the amount and duration of exposure.

Eyes: Vapors are irritating to the eyes. Liquid contact will cause stinging and tearing.

Inhalation: Excessive inhalation of high concentrations may be harmful. Mist or vapor can irritate the throat and lungs.

Breathing this material can cause central nervous system depression.

Ingestion: If swallowed this material will irritate the mucous membranes of the mouth throat and esophagus. Aspiration of

this material into the lungs may result in damage or death.

Acute oral toxicity:

LD50 rat: 2,737 mg/kg **Acute inhalation toxicity:**LD50 mouse: 32,000 mg/m3 **Acute dermal toxicity:**LD50 rabbit: 6,480 mg/kg

## **SECTION 12 · ECOLOGICAL INFORMATION**

Aquatic Toxicity: Toxicity to fish mortality NOEC - Cyprinodon variegatus (sheepshead minnow) - 400 mg/l - 96h

**Bio-accumulative potential:** This product is readily biodegradable.

Mobility: Accidental spillage may lead to penetration in the soil. Material will rapidly evaporate.

## **SECTION 13 · DISPOSAL CONSIDERATIONS**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

## **SECTION 14 - TRANSPORTATION**

## U.S. DEPARTMENT OF TRANSPORTATION (Road or Rail):

Proper Shipping Name: Ethyl methyl ketone

Hazard Class: 3 UN Number: 1193 Packaging Group: II



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November 12, 2015

### **SECTION 15 · REGULATORY INFORMATION**

### **US FEDERAL REGULATIONS**

Comprehensive Environmental Response and Liability Act (CERCLA)

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. The reportable quantity (RQ) for this material is 5000 pounds

Toxic Substance Control Act (TSCA): All components of this product are listed on the TSCA inventory list.

## SARA Section 311/312 (40 CFR 370) Hazard Categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**SARA Section 313 (40 CFR 372) Hazard Categories:** SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Water Act: This product contains Methyl Ethyl Ketone chemicals that are listed under the CWA.

Clean Air Act: This product contains no chemicals that are listed under the CAA.

**California Prop 65:** This product contains no chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

### **SECTION 16 · OTHER INFORMATION**

MSDS Revision Date: March 2015

NFPA Ratings: HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 0

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