

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name Eastman(TM) MPK, UHP
Product Identification Number(s) 19715-00, P1971500, P1971501, P1971504, P1971505, P19715E1, P19715E2, P19715E3
MSDS Prepared by Eastman Product Safety and Health
Chemical Name 2-pentanone
Synonym(s) 19715-00 901928
Molecular Formula C₅H₁₀O
Molecular Weight 86.13
Product Use chemical intermediate

2. COMPOSITION INFORMATION ON INGREDIENTS

(Typical composition is given, and it may vary. A certificate of analysis can be provided, if available.)

Weight % Component CAS Registry No.

100%	methyl propyl ketone	107-87-9
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3. HAZARDS IDENTIFICATION

FLAMMABLE LIQUID AND VAPOR
CAUSES EYE IRRITATION
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 PEROXIDE FORMER

HMIS® Hazard Ratings: Health - 2, Flammability - 3, Chemical Reactivity - 1

MATERIAL SAFETY DATA SHEET Revision Date: 06/05/2009

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HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

4. FIRST-AID MEASURES

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

Eyes: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention. In case of irritation from airborne exposure, move to fresh air. Get medical attention if symptoms persist.

Skin: Wash with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Seek medical advice.

5. FIRE FIGHTING MEASURES

Extinguishing Media: water spray, dry chemical, carbon dioxide, foam

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire.

Hazardous Combustion Products: carbon dioxide, carbon monoxide

Unusual Fire and Explosion Hazards: Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. May form peroxides of unknown stability.

6. ACCIDENTAL RELEASE MEASURES

Wear appropriate personal protective equipment. Eliminate all ignition sources. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

For Large Spills: Use water spray to disperse vapors and dilute spill to a nonflammable mixture. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

7. HANDLING AND STORAGE

Personal Precautionary Measures: Avoid breathing high vapor concentrations. Avoid contact with eyes and prolonged or repeated contact with skin. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep away from heat, sparks, and flame. Keep from contact with oxidizing materials. Use only with adequate ventilation. Minimize exposure to air. If peroxide formation is suspected, do not open or move container. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids.

Storage: Keep container tightly closed and in a well-ventilated place. Store away from heat and light.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Country specific exposure limits have not been established or are not applicable unless listed below.

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Eye Protection: Wear safety glasses with side shields (or goggles). Wear a full-face respirator, if needed.

Skin Protection: For operations where prolonged or repeated skin contact may occur, chemical-resistant gloves should be worn. Contact health and safety professional or manufacturer for specific information.

Recommended Decontamination Facilities: eye bath, washing facilities

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: liquid

Color: colorless

Odor: ketone

Odor Threshold: 11 ppm

Specific Gravity: 0.81 (20 °C)

Vapor Pressure: 20 °C; 37 mbar

Vapor Pressure for :

Vapor Density: 2.9

Melting Point: -78 °C

Boiling Point: 101 °C

Evaporation Rate: 2.3 (n-butyl acetate = 1)

Solubility in Water: moderate

Flash Point: 7.8 °C (Tag closed cup)

Lower Flammable Limit: 1.56 %(V)

Upper Flammable Limit: 8.7 %(V)

Autoignition Temperature: 449 °C (ASTM D2155)

Thermal Decomposition Temperature: (DTA) No exotherm to boiling

10. STABILITY AND REACTIVITY

Stability: Stable. On long term storage, materials containing similar functional groups form peroxides of unknown stability.

Incompatibility: Material reacts violently with strong oxidizing agents

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

Oral LD-50:(rat) 1,600 mg/kg

Dermal LD-50: (rabbit) 6,500 mg/kg

Skin Irritation (guinea pig) slight

Eye Irritation (rabbit) moderate

12. ECOLOGICAL INFORMATION

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

Oxygen Demand Data:

BOD-5: 1,380 mg/g

BOD-20: 1,800 mg/g

COD (Chemical Oxygen Demand):: 1,800 mg/g

Acute Aquatic Effects Data:

96 h LC-50 (fathead minnow): > 1000 Microliter (S)/L

96 h (snail): > 1000 Microliter (S)/L

96 h (Daphnia magna): > 1000 Microliter (S)/L

13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state, or local laws. Mix with compatible chemical which is less flammable and incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

14. TRANSPORT INFORMATION

Important Note: *Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*

ADR/RID:

Possible Shipping Description(s):

UN 1249 METHYL PROPYL KETONE 3 II

Sea - IMDG (International Maritime Dangerous Goods)

Possible Shipping Description(s):

UN 1249 METHYL PROPYL KETONE 3 II

Air - ICAO (International Civil Aviation Organization)

Possible Shipping Description(s):

UN 1249 Methyl propyl ketone 3 II

15. REGULATORY INFORMATION

SARA 311-312 Hazard Classification(s):

immediate (acute) health hazard

fire hazard

SARA 313: none, unless listed below

Carcinogenicity Classification (components present at 0.1% or more):

none, unless listed below

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing.

EINECS (European Inventory of Existing Commercial Chemical Substances): This product is listed on EINECS or otherwise complies with EINECS requirements. Any impurities present in this product are exempt from listing. **EINECS Number:** 203-528-1

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.

Philippines Inventory (PICCS) : This product is listed on the Philippine Inventory or otherwise complies with PICCS.

Inventory of Existing Chemical Substances in China: All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

16. OTHER INFORMATION

Visit our website at www.EASTMAN.com or email emnmsds@eastman.com

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment.

Highlighted areas indicate new or changed information.