

METHYL HEPTYL KETONE

MHK

CAUTIONARY RESPONSE INFORMATION		
Common Synonyms Ketone, heptyl methyl Nonan-2-one 2-Nonanone	Liquid	Colorless
<p>Keep people away. Shut off ignition sources. Call fire department. Stay upwind. Use water spray to "knock down" vapor. Avoid contact with liquid or vapor. Notify local health and pollution control agencies.</p>		
Fire	Combustible. Wear self-contained breathing apparatus and protective clothing. Extinguish with dry chemical, alcohol foam, or CO ₂ . Water may be ineffective on fire. Cool exposed containers with water.	
Exposure	<p>CALL FOR MEDICAL AID.</p> <p>VAPOR Irritating to eyes, nose and throat. If inhaled, will cause dizziness, headache, or difficult breathing. If in eyes, hold eyelids open and flush with plenty of water. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen.</p> <p>LIQUID Irritating to skin and eyes. If swallowed will cause nausea or vomiting. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water.</p>	
Water Pollution	Effect of low concentrations on aquatic life is unknown. Fouling shoreline. May be dangerous if it enter water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.	

1. CORRECTIVE RESPONSE ACTIONS	2. CHEMICAL DESIGNATIONS	3. HEALTH HAZARDS
Stop discharge	<p>2.1 CG Compatibility Group: 18; Ketones</p> <p>2.2 Formula: CH₃(CH₂)₆COCH₃</p> <p>2.3 IMO/UN Designation: Currently not available</p> <p>2.4 DOT ID No.: Not listed</p> <p>2.5 CAS Registry No.: 821-55-6</p> <p>2.6 NAERG Guide No.: Not listed</p> <p>2.7 Standard Industrial Trade Classification: 51625</p>	<p>3.1 Personal Protective Equipment: Self-contained breathing apparatus, rubber boots and heavy rubber gloves.</p> <p>3.2 Symptoms Following Exposure: May be harmful by inhalation, ingestion, or skin absorption. May cause eye and skin irritation.</p> <p>3.3 Treatment of Exposure: INHALATION: Call for medical aid. If not breathing give artificial respiration. If breathing is difficult give oxygen. SKIN: Wash with soap and copious amounts of water. EYES: Flush with copious amounts of water for at least 15 minutes.</p> <p>3.4 TLV-TWA: Not listed.</p> <p>3.5 TLV-STEL: Not listed.</p> <p>3.6 TLV-Ceiling: Not listed.</p> <p>3.7 Toxicity by Ingestion: Grade 2; LD₅₀ = 3.2 g/kg (rat)</p> <p>3.8 Toxicity by Inhalation: Currently not available.</p> <p>3.9 Chronic Toxicity: Currently not available</p> <p>3.10 Vapor (Gas) Irritant Characteristics: Vapors cause moderate irritation such that personnel will find high concentrations unpleasant. The effect is temporary.</p> <p>3.11 Liquid or Solid Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of skin.</p> <p>3.12 Odor Threshold: Currently not available</p> <p>3.13 IDLH Value: Not listed.</p> <p>3.14 OSHA PEL-TWA: Not listed.</p> <p>3.15 OSHA PEL-STEL: Not listed.</p> <p>3.16 OSHA PEL-Ceiling: Not listed.</p> <p>3.17 EPA A EGL: Not listed</p>

4. FIRE HAZARDS	7. SHIPPING INFORMATION								
4.1 Flash Point: 148°F C.C.	7.1 Grades of Purity: 99+%								
4.2 Flammable Limits in Air: Currently not available	7.2 Storage Temperature: Ambient								
4.3 Fire Extinguishing Agents: Water spray, carbon dioxide, dry chemical, alcohol foam.	7.3 Inert Atmosphere: Currently not available								
4.4 Fire Extinguishing Agents Not to Be Used: Water may be ineffective.	7.4 Venting: Currently not available								
4.5 Special Hazards of Combustion Products: Currently not available	7.5 IMO Pollution Category: B								
4.6 Behavior in Fire: Currently not available	7.6 Ship Type: 3								
4.7 Auto Ignition Temperature: Currently not available	7.7 Barge Hull Type: Currently not available								
4.8 Electrical Hazards: Currently not available	8. HAZARD CLASSIFICATIONS								
4.9 Burning Rate: Currently not available	8.1 49 CFR Category: Not listed.								
4.10 Adiabatic Flame Temperature: Currently not available	8.2 49 CFR Class: Not pertinent.								
4.11 Stoichiometric Air to Fuel Ratio: 61.9 (calc.)	8.3 49 CFR Package Group: Not listed.								
4.12 Flame Temperature: Currently not available	8.4 Marine Pollutant: No								
4.13 Combustion Molar Ratio (Reactant to Product): 18.0 (calc.)	8.5 NFPA Hazard Classification:								
4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	<table border="1"> <thead> <tr> <th>Category</th> <th>Classification</th> </tr> </thead> <tbody> <tr> <td>Health Hazard (Blue).....</td> <td>0</td> </tr> <tr> <td>Flammability (Red).....</td> <td>2</td> </tr> <tr> <td>Instability (Yellow).....</td> <td>0</td> </tr> </tbody> </table>	Category	Classification	Health Hazard (Blue).....	0	Flammability (Red).....	2	Instability (Yellow).....	0
Category	Classification								
Health Hazard (Blue).....	0								
Flammability (Red).....	2								
Instability (Yellow).....	0								
5. CHEMICAL REACTIVITY	8.6 EPA Reportable Quantity: Not listed.								
5.1 Reactivity with Water: No reaction	8.7 EPA Pollution Category: Not listed.								
5.2 Reactivity with Common Materials: No reaction	8.8 RCRA Waste Number: Not listed								
5.3 Stability During Transport: Stable	8.9 EPA FWCRA List: Not listed								
5.4 Neutralizing Agents for Acids and Caustics: Not pertinent	9. PHYSICAL & CHEMICAL PROPERTIES								
5.5 Polymerization: Will not occur	9.1 Physical State at 15° C and 1 atm: Liquid								
5.6 Inhibitor of Polymerization: Not pertinent	9.2 Molecular Weight: 142.24								
6. WATER POLLUTION	9.3 Boiling Point at 1 atm: 377.6°F = 192°C = 465.2°K (at 743 mmHg = .97 atm)								
6.1 Aquatic Toxicity: Currently not available	9.4 Freezing Point: -5.8°F = -21 °C = 252.2°K								
6.2 Waterfowl Toxicity: Currently not available	9.5 Critical Temperature: Currently not available								
6.3 Biological Oxygen Demand (BOD): Currently not available	9.6 Critical Pressure: Currently not available								
6.4 Food Chain Concentration Potential: Currently not available	9.7 Specific Gravity: 0.832								
6.5 GESAMP Hazard Profile: Bioaccumulation: T Damage to living resources: 3 Human Oral hazard: 1 Human Contact hazard: I Reduction of amenities: X	9.8 Liquid Surface Tension: Currently not available								
	9.9 Liquid Water Interfacial Tension: Currently not available								
	9.10 Vapor (Gas) Specific Gravity: 4.9								
	9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available								
	9.12 Latent Heat of Vaporization: Currently not available								
	9.13 Heat of Combustion: Currently not available								
	9.14 Heat of Decomposition: Currently not available								
	9.15 Heat of Solution: Currently not available								
	9.16 Heat of Polymerization: Currently not available								
	9.17 Heat of Fusion: Currently not available								
	9.18 Limiting Value: Currently not available								
	9.19 Reid Vapor Pressure: 0.0309 psia								

NOTES

METHYL HEPTYL KETONE

MHK

9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY		
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise	
C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
C U R R E N T L Y N O T A V A I L A B L E	90 138 162 189 218 237 261 299 340 383	0.019 0.097 0.193 0.387 0.774 1.160 1.934 3.867 7.735 14.696	C U R R E N T L Y N O T A V A I L A B L E	0 25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600	0.331 0.345 0.358 372.000 0.385 0.398 0.410 0.423 0.435 0.447 0.459 0.470 0.481 0.493 0.503 0.514 0.525 0.535 0.545 0.555 0.565 0.574 0.584 0.593 0.602		