

# 1-CHLORO-1-NITROPROPANE

CNE

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b> Korax	Liquid	Colorless	Unpleasant
<p><b>Keep people away.</b>  <b>AVOID CONTACT WITH LIQUID AND VAPOR.</b>  Wear rubber over clothing (including gloves), goggles, and approved respirator.  Shut off ignition sources. Call fire department.  Notify local health and pollution control agencies.  Protect water intakes.</p>			
<b>Fire</b>	<p>COMBUSTIBLE.  Wear self-contained breathing apparatus, chemical protective clothing, and gloves.  Extinguish with dry chemicals, CO<sub>2</sub>, or alcohol foam.  Use water spray to "knock down" vapors and cool exposed containers.</p>		
<b>Exposure</b>	<p>CALL FOR MEDICAL AID.  Move victim to fresh air.  Remove contaminated clothing and shoes.  Wash affected areas with plenty of soap and water.  IF IN EYES, hold eyelids open and flush with plenty of water.  IF SWALLOWED and victim is CONSCIOUS, have victim drink water; then induce vomiting.</p>		
<b>Water Pollution</b>	<p>Effects of low concentrations on aquatic life is unknown.  May be dangerous if it enters water intakes.  Notify local health and wildlife officials.  Notify operators of nearby water intakes.</p>		

<p><b>1. CORRECTIVE RESPONSE ACTIONS</b>  Stop discharge  Dilute and disperse  Collection Systems: Pump; Dredge  Do not burn</p>	<p><b>2. CHEMICAL DESIGNATIONS</b>  <b>2.1 CG Compatibility Group:</b> Not listed.  <b>2.2 Formula:</b> CH<sub>2</sub>CH<sub>2</sub>CHClNO<sub>2</sub>  <b>2.3 IMO/UN Designation:</b> Not listed.  <b>2.4 DOT ID No.:</b> Not listed.  <b>2.5 CAS Registry No.:</b> 600-25-9  <b>2.6 NAERG Guide No.:</b> Not listed  <b>2.7 Standard Industrial Trade Classification:</b> 51489</p>
<p><b>3. HEALTH HAZARDS</b></p> <p><b>3.1 Personal Protective Equipment:</b> Chemical protective clothing (impervious), gloves and face shield. Use approved respirator.</p> <p><b>3.2 Symptoms Following Exposure:</b> Human experience not reported. High concentrations caused lacrimation, nasal discharge, and pulmonary rales in rabbits.</p> <p><b>3.3 Treatment of Exposure:</b> CALL FOR MEDICAL AID. EYES: Flush immediately with copious amounts of water occasionally lifting lids. SKIN: Wash thoroughly with soap and water. INGESTION: If conscious drink large quantity of water immediately. After swallowing water, induce vomiting.</p> <p><b>3.4 TLV-TWA:</b> 2 ppm.  <b>3.5 TLV-STEL:</b> Not listed.  <b>3.6 TLV-Ceiling:</b> Not listed.  <b>3.7 Toxicity by Ingestion:</b> Grade 3; oral mouse LD<sub>50</sub> = 510 mg/kg  <b>3.8 Toxicity by Inhalation:</b> Currently not available.  <b>3.9 Chronic Toxicity:</b> Causes liver, kidney, and cardiovascular disease in animals.  <b>3.10 Vapor (Gas) Irritant Characteristics:</b> Vapors are moderately irritating such that personnel will not usually tolerate moderate or high concentrations.  <b>3.11 Liquid or Solid Characteristics:</b> Causes smarting of the skin and first-degree burns on short exposure; may cause second-degree burns on long exposure.  <b>3.12 Odor Threshold:</b> Currently not available  <b>3.13 IDLH Value:</b> 100 ppm  <b>3.14 OSHA PEL-TWA:</b> 20 ppm  <b>3.15 OSHA PEL-STEL:</b> Not listed.  <b>3.16 OSHA PEL-Ceiling:</b> Not listed.  <b>3.17 EPA AEGL:</b> Not listed</p>	

## 4. FIRE HAZARDS

- 4.1 Flash Point:** 144°F C.C.  
**4.2 Flammable Limits in Air:** Currently not available  
**4.3 Fire Extinguishing Agents:** Dry chemical, carbon dioxide, or alcohol foam.  
**4.4 Fire Extinguishing Agents Not to Be Used:** Not pertinent.  
**4.5 Special Hazards of Combustion Products:** May produce toxic gases, including nitrogen oxides, hydrogen chloride, and carbon monoxide.  
**4.6 Behavior in Fire:** Overheating in closed containers may cause explosions.  
**4.7 Auto Ignition Temperature:** Currently not available  
**4.8 Electrical Hazards:** Will attack some plastics, rubber, and coatings (insulators).  
**4.9 Burning Rate:** Currently not available  
**4.10 Adiabatic Flame Temperature:** Currently not available  
**4.11 Stoichiometric Air to Fuel Ratio:** 20.2 (calc.)  
**4.12 Flame Temperature:** Currently not available  
**4.13 Combustion Molar Ratio (Reactant to Product):** 7.5 (calc.)  
**4.14 Minimum Oxygen Concentration for Combustion (MOCC):** Not listed

## 5. CHEMICAL REACTIVITY

- 5.1 Reactivity with Water:** No reaction.  
**5.2 Reactivity with Common Materials:** Reactions with strong oxidizers may cause fires and explosions.  
**5.3 Stability During Transport:** Stable.  
**5.4 Neutralizing Agents for Acids and Caustics:** Not pertinent.  
**5.5 Polymerization:** Will not polymerize.  
**5.6 Inhibitor of Polymerization:** Not pertinent.

## 6. WATER POLLUTION

- 6.1 Aquatic Toxicity:** Currently not available  
**6.2 Waterfowl Toxicity:** Currently not available  
**6.3 Biological Oxygen Demand (BOD):** Currently not available  
**6.4 Food Chain Concentration Potential:** Currently not available  
**6.5 GESAMP Hazard Profile:** Not listed

## 7. SHIPPING INFORMATION

- 7.1 Grades of Purity:** Technical grades.  
**7.2 Storage Temperature:** Ambient.  
**7.3 Inert Atmosphere:** No requirement.  
**7.4 Venting:** Not listed.  
**7.5 IMO Pollution Category:** Currently not available  
**7.6 Ship Type:** Currently not available  
**7.7 Barge Hull Type:** Currently not available

## 8. HAZARD CLASSIFICATIONS

- 8.1 49 CFR Category:** Not listed.  
**8.2 49 CFR Class:** Not pertinent.  
**8.3 49 CFR Package Group:** Not listed.  
**8.4 Marine Pollutant:** No  
**8.5 NFPA Hazard Classification:**
- | Category                  | Classification |
|---------------------------|----------------|
| Health Hazard (Blue)..... | -              |
| Flammability (Red).....   | 2              |
| Instability (Yellow)..... | 0              |
- 8.6 EPA Reportable Quantity:** Not listed.  
**8.7 EPA Pollution Category:** Not listed.  
**8.8 RCRA Waste Number:** Not listed  
**8.9 EPA FWPCA List:** Not listed

## 9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 Physical State at 15° C and 1 atm:** Liquid  
**9.2 Molecular Weight:** 123.5  
**9.3 Boiling Point at 1 atm:** 285°F = 140°C = 413°K  
**9.4 Freezing Point:** Currently not available  
**9.5 Critical Temperature:** Currently not available  
**9.6 Critical Pressure:** Currently not available  
**9.7 Specific Gravity:** 1.2  
**9.8 Liquid Surface Tension:** Currently not available  
**9.9 Liquid Water Interfacial Tension:** Currently not available  
**9.10 Vapor (Gas) Specific Gravity:** 4.3  
**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:** Not pertinent.  
**9.17 Heat of Fusion:** Currently not available  
**9.18 Limiting Value:** Currently not available  
**9.19 Reid Vapor Pressure:** Currently not available

## NOTES

# 1-CHLORO-1-NITROPROPANE

CNE

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

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
68	0.800	68	0.112	68	0.00245		C U R R E N T L Y  N O T  A V A I L A B L E