

# MATERIAL SAFETY DATA SHEET

**Klotz Special Formula Products, Inc.**  
7424 Freedom Way  
Fort Wayne, IN 46818

**Telephone Number:**  
260-490-0489  
260-490-0490 (fax)  
**Chemtrec: 1-800-424-9300**

## SECTION I - IDENTIFICATION

**Chemical Name & Synonyms**  
Octane Booster

**Trade Name:** Klotz OCTANE BOOSTER – KL-602, KL-628

## SECTION II - HAZARDOUS COMPONENTS

**Ingredients:** Petroleum Distillate NOS – Mixture

**% By Weight:** 100%

## SECTION III - PHYSICAL DATA

**Boiling Point:** 189°F (88°C)  
**Freezing Point:** N/A  
**Melting Point:** N/A  
**Vapor Pressure (mmHg) @ 20°C:** 350-800 mmHg (68°F)  
**Solubility in Water:** Negligible  
**Evaporation Rate (Water=1):** Slower than Ether  
**Decomposition Temp:** N/A  
**Odor:** Pungent

**Specific Gravity (H<sub>2</sub>O=1):** 0.826 (60/60°F)  
**% Volatile By Volume:** 100%  
**Viscosity SUS:** 6 CST/40°F  
**Vapor Density (Air=1):** Heavier  
**Bulk Density:** N/A  
**Pour Point:** N/A  
**Appearance:** Dark Green Liquid  
**Weight per gallon:** 7.86

## SECTION IV - FIRE & EXPLOSION HAZARD INFORMATION

**Flash Point:** 87°F (30°C) (c.c)

**LEL:** 2.0

**Flammable Limits:** Lower – 1.5  
Upper – 7.6

**HMIS Code:** H=2 F=3 R=1  
**NFPA Code:** H=2 F=3 R=1

**Autoignition Temperature:** N/A

**Hazard Rating:**  
(Least =0, Slight = 1, Moderate = 2, High = 3, Extreme = 4)

**Extinguishing Media:** Water-fog, Foam, Carbon Dioxide, and Dry Chemical. Use only TriClass type dry Chemical extinguisher for classes A, B & C.

**Unusual Fire & Explosion Hazards:** Vapors at elevated temperatures are flammable.

**Special Fire Fighting Procedures:** Evacuate area of all unnecessary personnel. Avoid vapors. Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and other protective equipment and/or garments if conditions warrant. Shut off source, if possible. Water-fog or spray may be used to cool exposed containers and equipment. DO NOT spray water directly on fire – product will float and could be reignited on surface of water.

## SECTION V - REACTIVITY DATA

**Stability:** Stable

**Hazardous Polymerization and/or Combustion Products:** Will not occur

**Conditions to avoid:** Keep from contact with oxidizing materials

**Incompatibility (conditions to avoid):** Nitro methane, strong acids, strong oxidizers, (i.e. nitric acid, perchloric acid, sodium or potassium peroxide, etc.)

**Hazardous Decomposition Products:** Carbon Monoxide, Carbon Dioxide, Nitrogen compounds, Organic Acids.

## SECTION VI - SPILL, LEAK, & DISPOSAL PROCEDURES

**Precautions Required if Material is Released or Spilled:** Evacuate area of all unnecessary personnel. Wear protective equipment and/or garments if exposure conditions warrant. Shut off source if possible and contain spill. Protect from ignition. Keep out of water sources and sewers. Absorb in dry, inert material (sand, clay, sawdust, etc.) Transfer to disposal drums using non-sparking equipment

**Waste Disposal (insure conformity with all applicable disposal regulations):** Incinerate or place in RCRA permitted waste management facility

## SECTION VII - HEALTH HAZARD DATA

### Effects of Overexposure

**Inhalation:** Highly toxic via inhalation of vapors, skin absorption (occurs rapidly), or ingestion. The primary poisoning in man is its ability to impair the oxygen carrying capacity of blood. This causes anoxia due to the formation of met hemoglobin and may lead to cyanosis if treatment is not given promptly.

Headache is commonly the first symptom after exposure to vapor concentrations of 7-53ppm. Headaches become more intense as the severity of methemoglobinemia progresses. At >15%, cyanosis occurs (bluish color to lips, nose, ear lobes, and fingernails). A feeling of well-being may exist until cyanosis is about 40%, at which point weakness and dizziness occur. Higher concentrations may lead to shallow breathing, confusion, rapid heartbeat, unconsciousness and death.

**Skin Contact:** Symptoms similar to inhalation. May cause dermatitis

**Eye Contact:** Liquid is mildly irritating and may cause corneal damage

**Ingestion:** Symptoms similar to inhalation. Estimated toxic oral dose is about 1/4g.

**Medical Conditions Aggravated by Exposure:** Individuals with chronic respiratory disorders (i.e., asthma, chronic bronchitis, emphysema, etc.) may be adversely affected by any fume or airborne particulate matter exposure.

## SECTION VIII - FIRST AID PROCEDURES

**Ingestion:** If conscious, give 2-3 glasses of water and induce vomiting. Gastric lavage indicated; get immediate medical attention.

**Skin Contact:** Immediately remove all clothing, and wash entire body with soap and water, pay special attention to the hair, scalp, finger and toe nails, nostrils, and ear canals. Get proper medical attention.

**Eye Contact:** Flush with large amounts of water for at least 15 minutes. Get medical attention immediately

**Inhalation:** Immediately remove from exposure. If breathing is shallow or cyanosis is present, administer artificial respiration or oxygen as indicated. Get medical attention immediately.

## SECTION IX - SPECIAL PROTECTION INFORMATION

**Respiratory Protection:** Respiratory protection approved by NIOSH/MSHA for protection should be used to avoid inhalation of excessive air contaminants. Appropriate respirator selection depends on the type and the magnitude of exposure.

**Ventilation:** Local exhaust ventilation should be used to control vapor emissions in the workplace. General dilution ventilation may assist with the reduction of vapor concentrations.

**Skin Protective Equipment:** Natural rubber or supported neoprene gloves should be used to prevent skin absorption. Where employees may be splashed, polyethylene or rubber clothing should be provided. A face shield should be used to prevent contact with splashed liquid.

**Eye:** Employees should be required to wear chemical safety glasses to prevent eye contact.

**Other Protective Equipment:** Care should be taken to prevent absorption on leather boots through the use of rubber overshoes or rubber boots. Any eyewash station and safety shower should be available in the work area.

Wear protective equipment and garments if exposure conditions warranty. Contact immediate supervisor for specific instructions before work is initiated.

**Precautions for Safe Handling & Storage:** Class "B" poison. Extreme care should be taken to avoid spills or leaks. No open flame. Bottom unloading is extremely hazardous.

**Other Comments:** *Chronic Health Hazards* – Chronic exposure has been reported to produce red blood cell damage. Based upon the effects caused in animals, may cause liver and kidney damage. Earlier reports of reproductive toxicity have been refuted by CIT study (1981) which demonstrated a lack of embryo toxicity or teratogenicity. IRAC has evaluated the evidence for carcinogenicity. They conclude that epidemiological studies provide little evidence of an increased cancer risk. Mutagenicity tests are predominantly negative.

## SECTION X - DOT TRANSPORTATION

**Shipping Name:** Petroleum Distillate NOS  
**Hazard ID Number:** UN-1268  
**Label:** Petroleum Distillate NOS, UN-1268  
**Hazardous Substance/RQ:** N/A  
**IMCO Hazard Class:** 3  
**HMIS Code:** H=2 F=3 R=1  
**RCRA Classification:** Not a Marine Pollutant

**Hazard Class:** Flammable Liquid  
**Marking:** Petroleum Distillate NOS  
**Placard:** ORM-D  
**Packaging Group:** III  
**IMCO Page #:** 54 2004 Edition  
**NFPA Code:** H=2 F=3 R=1

**Revised:** 2-24-05