

# MATERIAL SAFETY DATA SHEET

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## SECTION I - IDENTIFICATION

**Chemical Name & Synonyms**

Petrol Motor Fuel, Aliphatic Aromatic Hydrocarbons

**Chemical Family**

**Trade Name:** Klotz 113 HIGH OCTANE RACING GASOLINE – KL-408

## SECTION II - HAZARDOUS COMPONENTS

**Ingredients:** Gasoline Mixture of Aliphatic & Aromatic Hydrocarbons plus additives

**Alcohols:** None

**Tetraethyl Lead:** 4.5 grams/gal

**% By Weight:** 100%

## SECTION III - PHYSICAL DATA

**Initial Boiling Point:** 104°F

**10%:** 158°F

**50%:** 213°F

**90%:** 245°F

**Vapor Density (Air=1):** 3 – 4

**Reid Vapor Pressure (PSI):** 6.5

**Solubility in Water:** Negligible

**Weight per gallon:** 6.1 lbs/gal

**Anti Foam:** Yes

**Specific Gravity:** .731 @ 60°F

**% Volatile By Volume:** 99.9%

**Research Octane:** 118

**Motor Octane:** 108

**Pump Octane:** 113

**Evaporation Rate (Butyl Acetate = 1):** > 1

**Appearance:** Red Liquid

**Oxygen M%:** 0

## SECTION IV - FIRE & EXPLOSION HAZARD INFORMATION

**Flash Point:** -43°C (-45°F)

**DOT Category:**

**LEL:**

**Flammability in Air: Lower:** 1.4

**Upper:** 7.6

**HMIS Code:** H=2 F=3 R=0

**NFPA Code:** H=1 F=3 R=0

**Auto Ignition Temperature:** > 280°C (>536°F)

**Extinguishing Media:** Dry Chemical, Foam or Carbon dioxide (CO2)

## SECTION IV - FIRE & EXPLOSION HAZARD INFORMATION - continued

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

**Fire & Explosion Hazards:** Carbon oxides, various hydrocarbons, and lead fumes formed when burned. Highly flammable vapors which are heavier than air may accumulate in low areas, and/or spread along ground away from handling site.

## SECTION V - REACTIVITY DATA

**Stability:** Stable

**Hazardous Polymerization:** Will not occur.

**Incompatibility (Conditions to avoid):** Oxygen & strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon oxides, lead fumes, and various hydrocarbons found when burned.

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

**Precautions Required if material is Release 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

**Health Hazard Classification:** Target Organ (Hematopoietic system, respiratory system, nervous system, and peripheral nervous system.)

### Carcinogen

<b>Product/Component</b>	<b>Cas No.</b>	<b>Conc.(%)</b>	<b>NTP</b>	<b>IRAC</b>	<b>OSHA</b>	<b>Other</b>
Gasoline (Wholly Vaporized)	Mixture	100	No	Group 2B	No	No
Gasoline (Engine Exhaust)	N/A	N/A	No	Group 2B	No	ND
Benzene	71-43-2	0-4.9	Group 1	Group 1	Yes	A1 (ACHGI) A1 (US EPA)

## SECTION VII - HEALTH HAZARD DATA - continued

**Toxicity Summary:** Upon ingestion, this material may be aspirated into the lungs and cause severe lung damage. Aspiration may result in transient central nervous system depression or excitement. Other effects may include hypoxia (oxygen deprivation), infection, pneumatocele (lung cavity) formation, chronic lung dysfunction or death.

Sub-chronic inhalation of component of this material, benzene, by rats, produced decreased white blood cell counts, decreased bone marrow cell activity, increased red blood cell activity, and cataracts. Chronic inhalation or oral administration of benzene in rats produced cancers of the liver, mouth and glands.

In humans, acute inhalation of benzene has been associated with nerve inflammation (polyneuritis), central nervous system depression and cardiac sensitization. The anesthetic action of benzene is similar to that of other anesthetic gases, consisting of preliminary stage of excitation followed by depression and, if exposure is continued, death through respiratory failure.

A component of this material, n-hexane, may cause damage to the peripheral and central nervous systems. This component can be absorbed through the skin and by inhalation routes.

A component of this material, tetraethyl lead, can be readily absorbed through the skin, from the gastrointestinal tract or by inhalation. Metabolites of tetraethyl lead can cross the blood-brain barrier and accumulate in the brain with repeated exposures.

**Major Routes of Entry:** Inhalation of vapors and skin contact with liquid.

**Other Special Effects:** The component n-hexane may cause damage to the peripheral nerves from acute and chronic exposure. This effect may be characterized by numbness in the arms and legs. Exposure to the component toluene during pregnancy has demonstrated limited evidence of fetal toxicity in laboratory animals. These effects include decreased fetal body weight and increased skeletal variations. Developmental effects from massive exposures to toluene in humans, has been purported in cases of substance abuse.

**Medical Conditions Aggravated by Exposure:** Individuals with chronic skin or respiratory disorders may have their conditions aggravated by exposure to this material. Exposure to high concentrations of this material may cause irregular heartbeats. Persons with pre-existing hear disorders may be more susceptible to this effect.

## SECTION VIII - FIRST AID PROCEDURES

**Inhalation:** If overcome by vapors or mists, move victim to fresh air. If the victim is not breathing, immediately begin CPR. If breathing is difficult, 100% supplemental oxygen should be administered by a qualified individual. Seek medical attention immediately.

**Skin Contact:** Immediately remove all clothing, and wash entire body with soap and water, paying special attention to the hair, scalp, finger and toenails, nostrils and ear canal. Get proper medical attention. Launder clothing before reuse.

**Eye Contact:** Flush with large amounts of water for at least 15 minutes while occasionally lifting both the lower and upper eyelids. Get medical attention immediately.

**Ingestion:** DO NOT INDUCE VOMITING. If spontaneous vomiting is about to occur, place victim's head below knees. Never give anything by mouth to a person who is not fully conscious. Seek medical attention immediately.

## SECTION IX - SPECIAL PROTECTION INFORMATION

**Respiration Protection:** For concentrations exceeding the recommended exposure level, use NIOSH/MSHA approved self-contained breathing apparatus (SCBA).

**Ventilation:** Use adequate ventilation to control exposure below recommended levels.

**Skin Protective Equipment:** Use impervious gloves. Use full-body, long-sleeved garments impervious to the material.

**Eye:** Use safety glasses with side shields.

**Precautions for Safe Handling & Storage:** Avoid inhalation and skin and eye contact. Wear protective equipment and/or garments described above if exposure conditions warrant. Wash hands after handling. Do not siphon by mouth. Launder contaminated clothing before reuse.

**Other Comments:** Personal protection information shown above is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

## SECTION X - DOT TRANSPORTATION

**Shipping Name:** Petroleum Distillate NOS

**Hazard ID Number:** UN 1268

**Label:** Flammable Liquid

**Hazardous Substance/RQ:** N/A

**IMCO Hazard Class:** 3

**HMIS Code:** H=2 F=3 R=0

**RCRA Classification:** Not a Marine Pollutant

**Hazard Class:** Flammable Liquid

**Marking:** Petroleum Distillate NOS

**Placard:** Flammable Liquid

**Packaging Group:** II

**IMCO Page #:** 54 2004 Edition

**NFPA Code:** H=1 F=3 R=0

**Revised:** 2-24-05