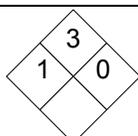


NFPA / WHMIS	Personal Protection	DOT/TDG Road/Rail
  	   	

## Section I. Product Identification and Uses

<b>Common/Trade name</b>	<b>Unleaded Gasoline (Lima)</b>		
<b>Synonyms</b>	Regular/Premium/Midgrade - Unleaded Gasoline, Petrol, Motor Fuel, Reformulated Gasoline, RFG, Conventional, Oxygenated, Non-Oxygenated, CARB Gasoline	<b>CAS #</b>	86290-81-5
<b>Chemical family</b>	Petroleum Hydrocarbon.	<b>DSL</b>	This product is on the Domestic Substances List (DSL). TSCA (Toxic Substance Control Act): This product is listed on the TSCA Inventory.
<b>Supplier</b>	Husky Lima Refinery, 1150 South Metcalf Street, Lima OH, 45804 403-298-6111 (General Information)	<b>Manufacturer</b>	Husky Lima Refinery 1150 South Metcalf Street Lima, OH 45804
<b>Material uses</b>	Motor Fuel		

## Section 2. First Aid Measures

<b>Eye contact</b>	Flush eyes for at least 15 minutes with clean water. Patch lightly, allowing drainage. Seek medical attention.
<b>Skin contact</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water. Seek medical attention if irritation develops.
<b>Inhalation</b>	Protect rescuer. Move exposed person to fresh air. If breathing has stopped apply artificial respiration. Seek medical attention.
<b>Ingestion</b>	If swallowed, do not induce vomiting or give liquids. Seek immediate medical attention.

## Section 3. Hazardous Ingredients

Name	CAS #	ACGIH TLVs (OSHA PELs in Section 7)						% by Weight
		TWA (ppm)	TWA (Mg/M3)	STEL (ppm)	STEL (Mg/M3)	CEIL (ppm)	CEIL (Mg/M3)	
Gasoline	68955-35-1	300	n/av	500	n/av	n/av	n/av	100
Benzene	71-43-2	0.5	n/av	2.5	n/av	n/av	n/av	<0.4
Toluene	108-88-3	20	525	n/av	n/av	n/av	n/av	1-10
Aromatics	1330-20-7	n/av	n/av	n/av	n/av	n/av	n/av	15-40
Octane (all isomers)	111-65-3	n/av	n/av	n/av	n/av	n/av	n/av	7-13

Continued on Next Page

Toxicity values of the hazardous ingredients	Benzene LD50: 930-5600mg/kg (Rat Oral)
	Benzene LC50: 13700ppm (Rat inhal)
	Toluene LD50: 5000 mg/kg (Rat, oral)
	Toluene LC50: 8000 ppm (Rat, inhalation)
	Toluene LD50: 14000 mg/kg (Rabbit, dermal)
	Octane LC50 Rat inhalation 118 g/cu m/4 hr

### Section 4. Physical Data

Physical state and appearance	Light straw to red clear liquid
Odor	Petroleum Odor Characteristic.
pH (1% soln/water)	Not applicable.
Odor threshold	Not available.
Evaporation rate	10 - 11 (Butyl acetate = 1)
Freezing point	May start to solidify at 6°C (42 °F)
Boiling point	26.7 - 226.7°C (80.1 - 440.1°F)
Specific gravity	0.66 - 0.75 (Water = 1)
Volatility	100%
Vapor density	3 - 4 (Air = 1)
Vapor pressure	60.8 - 101.3 kPa (456 - 760 mm Hg)
Water/oil dist. coeff.	Not available.
Solubility	Insoluble in cold water.
Molecular Weight	Not applicable.
Melting Point	Not available.
Density	Not available.

### Section 5. Fire and Explosion Data

Auto-ignition temperature	260°C (500°F)
Flash points	CLOSED CUP: -40°C (-40°F) (TCC)
Flammable limits	LOWER: 1.3% UPPER: 7.1%
Extinguishing Media	Use DRY chemicals, CO <sub>2</sub> , or foam to extinguish fire. Water may not be an effective medium to extinguish fire. Product will float and can be reignited on the water surface. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Special fire fighting procedures	Use supplied air or self contained breathing apparatus (SCBA) for fire conditions.
Flammability	Extremely flammable. Released vapors may form flammable/explosive mixtures at or above the flash point. Vapors may travel considerable distances to ignition sources and cause a flash fire. All storage containers and pumping equipment must be grounded.  <b>Remark</b> No additional remark.
Risks of explosion	This material is sensitive to static discharge. This product is not sensitive to mechanical impact.  <b>Remark</b> No additional remark.

**Continued on Next Page**

**Section 6. Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Hazardous decomp. products</b>	Carbon monoxide, carbon dioxide and irritant fumes and gases including sulfur oxides, nitrogen oxides and aldehydes.
<b>Reactivity</b>	Incompatible material: Strong acids, strong oxidizers, chlorine. Hazardous polymerization: Will not occur.
	<b>Remark</b> No additional remark.

**Section 7. Toxicological Properties**

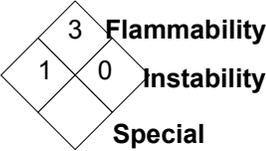
<b>Routes of entry</b>	Ingestion. Inhalation. Eye contact. Skin contact.
<b>OSHA PEL</b>	Benzene OSHA PEL 1 ppm (8 Hour TWA) 5 ppm (STEL- Short Term Exposure Limit) Toluene OSHA PEL 200 ppm (8 Hour TWA) 300 ppm (Acceptable Ceiling Concentration) 500 ppm (Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift) Octane OSHA PEL 500 ppm (8 Hour TWA)
<b>Toxicity to animals</b>	Benzene LD50: 930-5600mg/kg (Rat Oral) Benzene LC50: 13700ppm (Rat inhal) Toluene LD50: 5000 mg/kg (Rat, oral) Toluene LC50: 8000 ppm (Rat, inhalation) Toluene LD50: 14000 mg/kg (Rabbit, dermal) Octane LC50 Rat inhalation 118 g/cu m/4 hr
	<b>Remark</b> No additional remark.
<b>Chronic effects</b>	Gasoline has been classified by IARC (International Agency for Research on Cancer) as a product which is possibly carcinogenic to humans (IARC group 2B). This product contains small quantities of benzene. Benzene has been classified by the International Agency for Research on Cancer (IARC) as a group 1 product, indicating sufficient evidence of carcinogenicity. Epidemiological studies indicate that long term inhalation of benzene vapors at concentrations greater than the occupational exposure limit (1 ppm 8 hr) can result in leukemia. Benzene causes skin and eye irritation. This product may contain small quantities of benzene. Benzene is readily absorbed through the skin and eyes - skin and eye contact must be avoided. Toluene is known to cause visual impairment and affect reproduction. Toluene vapors cause narcosis. Toluene is known to cause anxiety, muscle fatigue, insomnia; paresthesia; dermatitis; liver and kidney damage. Octane is known to cause skin irritation, drowsiness, dermatitis, chemical pneumonitis (aspiration liquid) and narcosis.
	<b>Remark</b> No additional remark.
<b>Acute effects</b>	Sensitizing Capability: No effects known. Irritancy: Moderate skin, eye and upper respiratory tract irritant.
<b>Ingestion</b>	Pulmonary aspiration hazard if swallowed and vomiting occurs.
<b>Skin</b>	Prolonged skin contact can cause defatting of the skin resulting in dry cracked skin and dermatitis.
<b>Eyes</b>	Product vapors are moderately irritating to the eyes with effects beginning at 200-500 PPM.
<b>Inhalation</b>	Product vapors are moderately irritating to the respiratory tract. At concentrations near 1000 ppm, central nervous system effects such as headache, blurred vision, dizziness, and loss of coordination may occur. Exposure to vapor concentrations exceeding 5000 PPM may result in loss of consciousness, coma and death.
	<b>Remark</b> No additional remark.
<b>Synergistic materials</b>	Not available.

**Continued on Next Page**

**Section 8. Preventive Measures**

<b>Waste disposal</b>	Dispose of in accordance with all federal, state/provincial and local regulations.
<b>Storage</b>	Store in cool, well ventilated areas away from all sources of ignition. Confined spaces and head spaces in storage tanks may contain toxic, lethal and flammable concentrations of hydrogen sulfide and hydrocarbon vapors.
<b>Ventilation</b>	In poorly ventilated areas, provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit values.
<b>Spill and leak</b>	Evacuate unnecessary personnel. Eliminate all ignition sources. Stop leak if without risk. Contain spill and absorb with inert absorbent. Large spills should be removed with explosion proof vacuum equipment. Large pools may be covered with foam to prevent vapor evolution. Comply with federal, state/provincial, and local requirements for spill notification.

**Section 9. Classification/Regulatory Information**

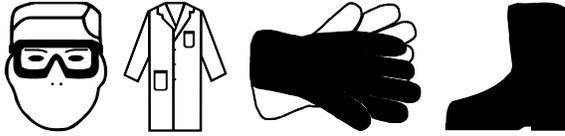
<b>DOT/TDG Road/Rail</b>	TDG CLASS 3.1: Flammable liquid.
	
	GASOLINE, 3, UN1203, PGII
	<b>Remark</b> No additional remark.
<b>WHMIS</b>	WHMIS CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). WHMIS CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
	 
	<b>Remark</b> No additional remark.
<b>Other</b>	This product is on the Domestic Substances List (DSL). TSCA (Toxic Substance Control Act): This product is listed on the TSCA Inventory. <b>Refer to federal, state/provincial, and local legislation for further requirements.</b>
<b>National Fire Protection Association (U.S.A.)</b>	

**Section 10. Protective Clothing**

<b>Eye</b>	Non-vented chemical goggles to protect against splashing of product into the eyes and to prevent eye irritation from the solvent vapors.
<b>Skin</b>	Impervious gloves and clothing should be worn as appropriate to protect against skin contact. Neoprene or nitrile material is suggested.
<b>Respiratory</b>	Respiratory protection may be required in poorly ventilated areas. Properly fitted air purifying masks equipped with organic vapor filters will provide protection at low concentrations. Wear NIOSH approved respiratory protection adequate for the expected concentration of the substance in the air.

**Continued on Next Page**

**Other** As required by the situation according to your companies policies and procedures. Contact your supervisor for direction.



**Section 11. Preparation Information**

**References** TOMES PLUS by Micromedex Inc. Provisional Domestic Substances List (CEPA) CPPI WHMIS Classification Guidelines Product/stream Toxicology Testing Priority List. -Manufacturer's Material Safety Data Sheet. -SAX, N.I. Dangerous Properties of Industrial Materials. Toronto, Van Nostrand Reinold, 6e ed. 1984.

**MSDS Status**

**Acronyms:** TLV = Threshold Limit Value N/AP = Not applicable N/AV = Not Available COC = Cleveland Open Cup PMCC = Pensky Martens Closed Cup

**Validated by Husky Corporate Hygiene on 3/19/2009.**

**Verified by Husky Corporate Hygiene.**

**Supersedes:** Not available.

**Printed 3/16/2009.**

**Emergency Phone # Canada: 403-262-2111**

**Emergency Phone # USA: Chemtrec 1-800-424-9300**

*While the company believes the data set forth herein are accurate as of the date hereof, the company makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation and verification.*