

(Material) Safety Data Sheet



Section 1 - Product and Company Identification

Material Name	▪ Aviation Gasoline
CAS Number	▪ No data available
Product Description	▪ Blue liquid with mild, gasoline like odor.
Synonyms	▪ Avgas 100 LL; Aviation Gasoline
Manufacturer	▪ Delek Refining, Ltd. 425 McMurrey Drive Tyler, TX 75702 United States www.delekus.com
Telephone	
General	▪ 903-579-3400
General	▪ 903-579-3502
<u>Emergency</u>	▪ (800) 424-9300
<u>Emergency</u>	▪ (703) 527-3887
Preparation Date	▪ 1/4/2011
Last Revision Date	▪ 1/4/2011

Section 2 - Hazards Identification

Emergency Overview

DANGER

Highly flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause respiratory irritation. May be fatal if swallowed and enters airways. May cause damage to organs - Ear, Liver, Kidney through prolonged or repeated exposure via Inhalation. May cause cancer . May cause genetic defects . Suspected of damaging fertility or the unborn child - . Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Prevention Do not breathe dust, fume, gas, mist, vapours and/or spray. Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. Ground and/or bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use explosion-proof - electrical, ventilating and/or lighting equipment. Keep container tightly closed. Wear protective gloves - Gloves and eye/face protection , . Use personal protective equipment as required. Wash : thoroughly after handling. Avoid release to the environment.

Response In case of fire: Use appropriate media for extinction. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. If skin irritation occurs:

Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. IF exposed or concerned: Get medical advice/attention. Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment, see supplemental first aid information.

Storage/Disposal Store in a well-ventilated place. Keep cool. Store locked up. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

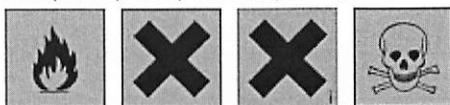


Flammable liquid. Irritating to eyes, skin, and mucous membranes. Aspiration hazard if swallowed. Can enter lungs and cause damage. May cause cancer, reproductive and mutagenic effects.

- | | |
|----------------------|--|
| Physical Form | ▪ Liquid |
| Color | ▪ Blue |
| Odor | ▪ Mild, gasoline-like. |
| Flash Point | ▪ > -46 C(> -50.8 F) |
| UEL | ▪ 7 % |
| LEL | ▪ 1.2 % |
| OSHA | ▪ Flammable Liquid, Flammable/Combustible - Class IB, Irritant, Carcinogen |
| WHMIS | ▪ Class B - Flammable and Combustible Materials - Division 2, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B |



- | | |
|-----------|--|
| EU | ▪ Highly Flammable - F, Dangerous to the Environment - N, Harmful - Xn, Irritant - Xi, Substances Toxic To Reproduction - Category 3 - Repr.Cat.3, Mutagenic Substances - Category 2 - Muta.Cat.2, Carcinogenic Substances - Category 1 - Carc.Cat.1
R11, R51, R53, R48/20, R65, R36/37/38, R45, R46, R63 |
|-----------|--|



- | | |
|--|---|
| GHS | ▪ Flammable Liquids - Category 2, Acute Hazards to the aquatic environment - Category 2, Chronic Hazards to the aquatic environment - Category 3, Specific Target Organ Toxicity Single Exposure - Category 3, Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Germ Cell Mutagenicity - Category 1 A/B, Carcinogenicity - Category 1A, Aspiration - Category 1, Toxic to Reproduction - Category 2 |
| Route Of Entry | ▪ Inhalation, Skin, Eye, Ingestion/Oral |
| Target Organs | ▪ Ear/Ototoxin, Skin/Dermal, Lungs, Central Nervous System (CNS), Peripheral Nervous System (PNS), Heart/Cardiovascular System, Liver/Heptatoxin, Kidney/Nephrotoxin |
| Medical Conditions Aggravated by Exposure | ▪ Ear/Ototoxin, Skin/Dermal, Lungs, Central Nervous System (CNS) Peripheral Nervous System (PNS) Brain, Blood and/or Immune System, Anemia, Bone Marrow, Heart/Cardiovascular System, Liver/Heptatoxin, Kidney/Nephrotoxin, |



Potential Health Effects

Inhalation

Acute (Immediate)

- May cause irritation. Symptoms may include coughing and difficulty breathing. High vapor concentrations can produce central nervous system depression.

Chronic (Delayed)

- Extreme overexposure to toluene may cause cardiac sensitization.

Skin

Acute (Immediate)

- May cause irritation. Symptoms may include pain, itching, discoloration, swelling, and blistering.

Chronic (Delayed)

- Petroleum products are skin defatting agents and can cause dermatitis on prolonged or repeated exposure.

Eye

Acute (Immediate)

- May cause irritation. Symptoms may include pain, tearing, reddening, swelling and impaired vision.

Chronic (Delayed)

- No data available.

Ingestion

Acute (Immediate)

- Aspiration into the lungs may cause chemical pneumonitis. May cause gastrointestinal disturbances including diarrhea, nausea, and vomiting.

Chronic (Delayed)

- No data available

Mutagenic Effects

- Repeated and prolonged exposure may cause mutagenic effects.

Carcinogenic Effects

- Repeated and prolonged exposure may cause cancer.

Carcinogenic Effects				
	CAS	NTP	IARC	OSHA
Benzene	71-43-2	Known Human Carcinogen	Group 1-Carcinogenic	Specifically Regulated Carcinogen
Toluene	108-88-3	Evidence of Carcinogenicity	Not established	Not established
Ethane, 1,2-dibromo-	106-93-4	Reasonably Anticipated to be Human Carcinogen	Group 2A-Probable Carcinogen	Not established

Reproductive Effects

- Repeated and prolonged exposure may affect the reproductive system.

Other Chronic Effects

- Humans who were occupationally exposed to concentrations of toluene as low as 100 ppm for long periods of time have experienced hearing deficits. Hearing loss, as demonstrated using behavioral and electrophysiological testing, as well as by observation of structural damage to cochlear hair cells, occurred in experimental animals exposed to toluene. It also appears that toluene exposure and noise may interact to produce hearing deficits. This material contains organic lead. Organic lead (as Pb) is toxic by ingestion, inhalation, and skin contact. Signs and symptoms of chronic or subacute poisoning may include insomnia, vomiting, dizziness, visual or auditory hallucinations, convulsions and death.

Potential Environmental Effects

- May cause adverse effects on the aquatic environment.

Section 3 - Composition/Information on Ingredients

Hazardous Components						
Chemical Name	CAS	%(weight)	UN;EINECS	LD50/LC50	EU Classification & R Phrases	Other
Naphtha (petroleum), light alkylate	64741-66-8	70% TO 100%	265-068-8	NDA	Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65	NDA
Toluene	108-88-3	0% TO 20%	203-625-9	Ingestion/Oral-Rat LD50: =636 mg/kg Inhalation-Rat LC50: =49 g/m ³ /4 Hour(s) Skin-Rabbit LD50: =14100 µL/kg	F; R11 Xi; R38 Xn; R48/20 R65 Repr.Cat.3; R63 R67	NDA
Benzene	71-43-2	0% TO 1%			F; R11 Xi; R36/38 Carc.Cat.1; R45 Muta.Cat.2; R46 T; R48/23/24/25 Xn; R65	NDA
Aviation Gasoline		100%	NDA	NDA	NDA	NDA
Plumbane, tetraethyl-	78-00-2	< 0.1%	201-075-4	Ingestion/Oral-Rat LD50: =12300 µg/kg Inhalation-Rat LC50: =850 mg/m ³ /1 Hour(s)	NDA	NDA
Ethane, 1,2-dibromo-	106-93-4	< 0.01%	203-444-5	Inhalation-Rat LC50: =14300 mg/m ³ /30 Minute(s) Skin-Rabbit LD50: =300 mg/kg	T; R23/24/25 Xi; R36/37/38 Carc.Cat.2; R45 N; R51 R53	NDA

Under United States Regulations (29 CFR 1900.1200 - Hazard Communication Standard), this product is considered hazardous. According to the Globally Harmonized Standard for Classification and Labeling (GHS) this product is considered hazardous. In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS). This product is considered dangerous according to the European Directive 67/548/EEC.

See Section 11 for Toxicological Information.

Section 4 - First Aid Measures

- Inhalation**
- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Seek medical attention.
- Skin**
- In case of contact with substance, immediately flush skin with running water for at least 20 minutes. If skin irritation occurs: Get medical advice/attention. For minor skin contact, avoid spreading material on unaffected skin. Take off contaminated clothing and wash before reuse.
- Eye**
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Ingestion**
- Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If person is drowsy or unconscious and vomiting, place on the left side with the head down. Seek medical attention.
- Notes to Physician**
- Material if aspirated into the lungs may cause chemical pneumonitis. Treat appropriately.

See Section 2 for Potential Health Effects.

Section 5 - Fire Fighting Measures

- Extinguishing Media**
- SMALL FIRES: Dry chemical, CO₂, water spray or regular foam.
 - LARGE FIRE: Water spray, fog or regular foam.

- Unsuitable Extinguishing Media**
 - No data available.
- Firefighting Procedures**
 - **LARGE FIRES:** Dike fire control water for later disposal; do not scatter the material. Move containers from fire area if you can do it without risk.
 - **FIRE INVOLVING TANKS AND CAR/TRAILER LOADS:** Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
 - **FIRES INVOLVING TANKS OR CAR/TRAILER LOADS:** Cool containers with flooding quantities of water until well after fire is out.
 - **FIRES INVOLVING TANKS OR CAR/TRAILER LOADS:** Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
 - **FIRES INVOLVING TANKS OR CAR/TRAILER LOADS:** ALWAYS stay away from tanks engulfed in fire.
 - **FIRES INVOLVING TANKS OR CAR/TRAILER LOADS:** For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.
- Unusual Fire and Explosion Hazards**
 - May be ignited by heat, sparks or flames.
 - Containers may explode when heated.
 - Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may travel to source of ignition and flash back.
 - Vapors may form explosive mixtures with air.
 - Vapor explosion hazard indoors, outdoors or in sewers.
- Hazardous Combustion Products**
 - Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.
- Protection of Firefighters**
 - Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Flash Point**
 - > -46 C(> -50.8 F) TCC (Tagliabue Closed Cup)
- Explosion Limits**
 - Upper**
 - 7
 - Lower**
 - 1.2
- Autoignition Temperature**
 - 824 F(440 C)

See Section 8 (Exposure Controls/Personal Protection)

Section 6 - Accidental Release Measures


- Personal Precautions**
 - Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Emergency Procedures**
 - As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Stop leak if you can do it without risk. Ventilate closed spaces before entering.
- Environmental Precautions**
 - Prevent entry into waterways, sewers, basements or confined areas.
- Containment/Clean-up Measures**
 - Immediate clean-up of spill is recommended.
 - All equipment used when handling the product must be grounded.
 - A vapor suppressing foam may be used to reduce vapors.
 - Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
 - Use clean non-sparking tools to collect absorbed material.
 - **LARGE SPILLS:** Dike far ahead of liquid spill for later disposal.
 - **LARGE SPILLS:** Water spray may reduce vapor; but may not prevent ignition in closed spaces.
- Prohibited Materials**
 - No data available
- General Information**
 - If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (Phone number 800-424-8802)

Section 7 - Handling and Storage

- Handling**
- Empty containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. Keep away from heat, sparks, and flame – No Smoking. Bond and ground all equipment when transferring from one vessel to another. Product can accumulate static charge by flow or agitation. Do not enter confined spaces such as tanks or pits without following proper entry procedures.
- Storage**
- Store in a cool/low-temperature, well-ventilated place away from heat and ignition sources. Store only in approved containers. Store locked up. Keep container tightly closed. Containers should be clearly labeled. Protect containers against physical damage. Keep away from incompatible materials. Keep away from fire.
- Special Packaging Materials**
- No data available
- Incompatible Materials or Ignition Sources**
- Keep away from ignition sources.
- Container Warnings**
- Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous.

Section 8 - Exposure Controls/Personal Protection

Personal Protective Equipment

- Pictograms**
- 
- Respiratory**
- Use NIOSH approved respiratory protection (US requirements) Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters.
- Eye/Face**
- Wear protective eyewear (goggles, face shield, or safety glasses).
- Hands**
- Chemical-resistant, impervious gloves should be when handling this product.
- Skin/Body**
- Wear protective clothing
- General Industrial Hygiene Considerations**
- Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking, or smoking.
- Engineering Measures/Controls**
- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash station and quick-drench shower facility should be available in the work area.

Exposure Limits/Guidelines						
	Result	ACGIH	Canada Ontario	Canada Quebec	Europe	NIOSH
Toluene (108-88-3)	STELs	Not established	Not established	Not established	100 ppm STEL; 384 mg/m3 STEL	150 ppm STEL; 560 mg/m3 STEL
	TWAs	20 ppm TWA	20 ppm TWAEV	50 ppm TWAEV; 188 mg/m3 TWAEV	50 ppm TWA; 192 mg/m3 TWA	100 ppm TWA; 375 mg/m3 TWA
Benzene (71-43-2)	STELs	2.5 ppm STEL	2.5 ppm STEV (applies to workplaces to which the designated substance regulation does not apply); 2.5 ppm STEV (designated substances regulation)	5 ppm STEV; 15.5 mg/m3 STEV	Not established	1 ppm STEL
	TWAs	0.5 ppm TWA	0.5 ppm TWAEV (applies to workplaces to which the designated substance regulation does not apply); 0.5 ppm TWAEV (designated substance regulation)	1 ppm TWAEV; 3 mg/m3 TWAEV	Not established	0.1 ppm TWA
Ethane, 1,2-dibromo- (106-93-4)	TWAs	Not established	Not established	20 ppm TWAEV; 155 mg/m3 TWAEV	Not established	0.045 ppm TWA
Plumbane, tetraethyl- (78-00-2)	STELs	Not established	0.30 mg/m3 STEV (designated substances regulation)	Not established	Not established	Not established
	TWAs	0.1 mg/m3 TWA (as Pb)	0.10 mg/m3 TWAEV (designated substance regulation)	0.05 mg/m3 TWAEV (as Pb)	Not established	0.075 mg/m3 TWA (as Pb)

Exposure Limits/Guidelines (Con't.)		
	Result	OSHA
Toluene (108-88-3)	Ceilings	300 ppm Ceiling
	TWAs	200 ppm TWA
Benzene (71-43-2)	Ceilings	25 ppm Ceiling
	TWAs	10 ppm TWA (applies to industry segments exempt from the benzene standard at 29 CFR 1910.1028); 1 ppm TWA
Ethane, 1,2-dibromo- (106-93-4)	Ceilings	30 ppm Ceiling
	TWAs	20 ppm TWA
Plumbane, tetraethyl- (78-00-2)	TWAs	0.075 mg/m3 TWA (as Pb)

Exposure Control Notations

Canada Ontario

•Ethane, 1,2-dibromo- (106-93-4): **Skin:** (Absorption through skin, eyes, or mucous membranes)

Canada Quebec

- Plumbane, tetraethyl- (78-00-2): **Skin:** (Skin designation)
- Ethane, 1,2-dibromo- (106-93-4): **Skin:** (Skin designation)
- Toluene (108-88-3): **Skin:** (Skin designation)

ACGIH

- Plumbane, tetraethyl- (78-00-2): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen) | **Skin:** (Skin - potential significant contribution to overall exposure by the cutaneous route)
- Ethane, 1,2-dibromo- (106-93-4): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans) | **Skin:** (Skin - potential significant contribution to overall exposure by the cutaneous route)
- Toluene (108-88-3): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Benzene (71-43-2): **Carcinogens:** (A1 - Confirmed Human Carcinogen) | **Skin:** (Skin - potential significant contribution to overall exposure by the cutaneous route)

Exposure Limits Supplemental

ACGIH

- Plumbane, tetraethyl- (78-00-2): **TLV Basis - Critical Effects:** (CNS impairment)
- Toluene (108-88-3): **BEIs:** (0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene; 0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene; 0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)) | **TLV Basis - Critical Effects:** (female reproductive; pregnancy loss; visual impairment)
- Benzene (71-43-2): **BEIs:** (25 µg/g creatinine Medium: urine Time: end of shift Parameter: S-Phenylmercapturic acid (background); 500 µg/g creatinine Medium: urine Time: end of shift Parameter: t,t-Muconic acid (background)) | **TLV Basis - Critical Effects:** (leukemia)

Key to abbreviations

STEL = Short Term Exposure Limits are based on 15-minute exposures
 STEV = Short Term Exposure Value
 TWAEV = Time-Weighted Average Exposure Value
 TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

ACGIH = American Conference of Governmental Industrial Hygiene
 NIOSH = National Institute of Occupational Safety and Health
 OSHA = Occupational Safety and Health Administration

Section 9 - Physical and Chemical Properties

- Physical Form** • Liquid
Appearance/Description • Blue liquid with mild, gasoline-like odor.

Color : Blue		Odor : Mild, gasoline-like.	
Taste : NDA		Odor Threshold : NDA	
Boiling Point:	140 to 338 F(60 to 170 C)	Vapor Pressure:	38 to 49 kPa @ 100.40 F
Melting Point:	-58 C(-72.4 F)	Vapor Density:	3 to 4 Air=1
Specific Gravity:	0.65 to 0.75	Evaporation Rate:	NDA
Density:	5.4243 to 6.2588 lbs/gal	VOC (Wt.):	NDA
Bulk Density:	NDA	VOC (Vol.):	NDA
pH:	NDA	Volatiles (Wt.):	NDA
Water Solubility:	Slightly Soluble	Volatiles (Vol.):	100 %
Solvent Solubility:	NDA	Flash Point:	> -46 C(> -50.8 F)
Viscosity:	NDA	Flash Point Test Type:	TCC (Tagliabue Closed Cup)
Half-Life:	NDA	UEL:	7 %
Octanol/Water Partition coefficient:	NDA	LEL:	1.2 %
Coefficient of water/oil distribution:	NDA	Autoignition:	824 F(440 C)
Bioaccumulation Factor:	NDA	Bioconcentration Factor:	NDA
Biochemical Oxygen Demand BOD/BOD5:	NDA	Chemical Oxygen Demand:	NDA

- Persistence/Degradability** ▪ No data available.
- Bioaccumulation Potential** ▪ No data available.
- Mobility in Soil** ▪ No data available.

This material is expected to be readily biodegradable. Following spillage, the more volatile components of gasoline will be rapidly lost, with concurrent dissolution of these and other constituents into the water. Factors such as local environmental conditions (temperature, wind, mixing or wave action, soil type, etc.), photo-oxidation, biodegradation and adsorption onto suspended sediments, can contribute to the weathering of spilled gasoline.

Section 13 - Disposal Considerations

- Product** ▪ This material, if discarded as produced, would be a RCRA "characteristic" hazardous waste due to the characteristic(s) of ignitability (D001) and benzene (D018). If the material is spilled to soil or water, characteristic testing of the contaminated materials is recommended. Further, this material, once it becomes a waste, is subject to the land disposal restrictions in 40 CFR 268.40 and may require treatment prior to disposal to meet specific standards. Consult state and local regulations to determine whether they are more stringent than the federal requirements.
- Packaging** ▪ Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Empty drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner.

Section 14 - Transportation Information

DOT - United States - Department of Transportation

- Shipping Name: Gasoline
- ID Number: 1203
- Hazard Class: 3
- Labeling Class: 3
- Packing Group: II

TDG - Canada - Transport of Dangerous Goods

- Shipping Name: Gasoline
- ID Number: 1203
- Hazard Class: 3
- Labeling Class: 3

IMO/IMDG -International Maritime Transport

- Shipping Name: Gasoline
- ID Number: 1203
- Hazard Class: 3
- Labeling Class: 3

ADN - Europe Transport of Dangerous Goods by Road/Inland Waterway

- Shipping Name: Gasoline
- ID Number: 1203
- Hazard Class: 3
- Labeling Class: 3

IATA - International Air Transport Association

- Shipping Name: Gasoline

ID Number: 1203
Hazard Class: 3
Labeling Class: 3

ADR - Europe Transport of Dangerous Goods by Road/Inland Waterway

Shipping Name: Gasoline
ID Number: 1203
Hazard Class: 3
Labeling Class: 3

RID - Europe Transport of Dangerous Goods by Railways

Shipping Name: Gasoline
ID Number: 1203
Hazard Class: 3
Labeling Class: 3

Section 15 - Regulatory Information

- SARA Hazard Classifications** ▪ Acute, Chronic, Fire
- Risk & Safety Phrases** ▪ R11 Highly flammable.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R45 May cause cancer.
R46 May cause heritable genetic damage.
R63 Possible risk of harm to the unborn child.
R65 Harmful: may cause lung damage if swallowed.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S16 Keep away from sources of ignition - No Smoking.
S24/25 Avoid contact with skin and eyes.
S23 Do not breathe gas/fumes/vapour/spray.
S27 Take off immediately all contaminated clothing.
S29/35 Do not empty into drains; dispose of this material and its container in a safe way.
S36 Wear suitable protective clothing.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S51 Use only in well ventilated areas.
S61 Avoid release to the environment. Refer to special instructions/ Safety Data Sheets.
S62 If swallowed, do not induce vomiting. Seek medical advice immediately and show the container or label.

State Right To Know				
Component	CAS	MA	NJ	PA
Naphtha (petroleum), light alkylate	64741-66-8	No	No	No
Toluene	108-88-3	Yes	Yes	Yes
Benzene	71-43-2	Yes	Yes	Yes
Aviation Gasoline	NDA	No	No	No
Plumbane, tetraethyl-	78-00-2	Yes	Yes	Yes
			Yes	Yes

Ethane, 1,2-dibromo-	106-93-4	Yes	Yes	Yes
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Inventory					
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	TSCA
Naphtha (petroleum), light alkylate	64741-66-8	Yes	No	Yes	Yes
Toluene	108-88-3	Yes	No	Yes	Yes
Benzene	71-43-2	Yes	No	Yes	Yes
Aviation Gasoline	NDA	No	No	No	No
Plumbane, tetraethyl-	78-00-2	Yes	No	Yes	Yes
Ethane, 1,2-dibromo-	106-93-4	Yes	No	Yes	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% D1A
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% D1A, D2A
- Toluene 108-88-3 0% TO 20% B2, D2A, D2B
- Benzene 71-43-2 0% TO 1% B2, D2A, D2B

Canada - WHMIS - Ingredient Disclosure List

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% 1 %
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% 0.1 %
- Toluene 108-88-3 0% TO 20% 1 %
- Benzene 71-43-2 0% TO 1% 0.1 %

Environment

Canada - CEPA - Priority Substances List

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% Not Listed
- Toluene 108-88-3 0% TO 20% Priority Substance List 1 (substance not considered toxic)
- Benzene 71-43-2 0% TO 1% Priority Substance List 1 (substance considered toxic)

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% T; R23/24/25 Xi; R36/37/38 Carc.Cat.2; R45 N; R51 R53
- Toluene 108-88-3 0% TO 20% F; R11 Xi; R38 Xn; R48/20 R65 Repr.Cat.3; R63 R67
- Benzene 71-43-2 0% TO 1% F; R11 Xi; R36/38 Carc.Cat.1; R45 Muta.Cat.2; R46 T; R48/23/24/25 Xn; R65

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% 1%<=C: T; R23/24/25 0.1%<=C<1%: Xn; R20/21/22
- Toluene 108-88-3 0% TO 20% Not Listed
- Benzene 71-43-2 0% TO 1% Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% T R:45-46-65 S:53-45
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% T N R:45-23/24/25-36/37/38-51/53 S:53-45-61
- Toluene 108-88-3 0% TO 20% F Xn R:11-38-48/20-63-65-67 S:(2)-36/37-46-62
- Benzene 71-43-2 0% TO 1% F T R:45-46-11-36/38-48/23/24/25-65 S:53-45

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% H, P
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% E
- Toluene 108-88-3 0% TO 20% Not Listed
- Benzene 71-43-2 0% TO 1% E

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% S:53-45
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% S:53-45-61
- Toluene 108-88-3 0% TO 20% S:(2)-36/37-46-62
- Benzene 71-43-2 0% TO 1% S:53-45

United States**Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% Not Listed
- Toluene 108-88-3 0% TO 20% Not Listed
- Benzene 71-43-2 0% TO 1% Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% Not Listed
- Toluene 108-88-3 0% TO 20% Not Listed
- Benzene 71-43-2 0% TO 1% 5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action Level; 1 ppm TWA

Environment**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01%
- Toluene 108-88-3 0% TO 20%
- Benzene 71-43-2 0% TO 1% (including Benzene from gasoline)

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

● Naphtha (petroleum), light alkylate	64741-66-8	70% TO 100%	Not Listed
● Plumbane, tetraethyl-	78-00-2	< 0.1%	10 lb final RQ; 4.54 kg final RQ
● Ethane, 1,2-dibromo-	106-93-4	< 0.01%	1 lb final RQ; 0.454 kg final RQ
● Toluene	108-88-3	0% TO 20%	1000 lb final RQ; 454 kg final RQ
● Benzene	71-43-2	0% TO 1%	10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule)

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

● Naphtha (petroleum), light alkylate	64741-66-8	70% TO 100%	Not Listed
● Plumbane, tetraethyl-	78-00-2	< 0.1%	Not Listed
● Ethane, 1,2-dibromo-	106-93-4	< 0.01%	Not Listed
● Toluene	108-88-3	0% TO 20%	Not Listed
● Benzene	71-43-2	0% TO 1%	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

● Naphtha (petroleum), light alkylate	64741-66-8	70% TO 100%	Not Listed
● Plumbane, tetraethyl-	78-00-2	< 0.1%	10 lb EPCRA RQ
● Ethane, 1,2-dibromo-	106-93-4	< 0.01%	Not Listed
● Toluene	108-88-3	0% TO 20%	Not Listed
● Benzene	71-43-2	0% TO 1%	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

● Naphtha (petroleum), light alkylate	64741-66-8	70% TO 100%	Not Listed
● Plumbane, tetraethyl-	78-00-2	< 0.1%	100 lb TPQ
● Ethane, 1,2-dibromo-	106-93-4	< 0.01%	Not Listed
● Toluene	108-88-3	0% TO 20%	Not Listed
● Benzene	71-43-2	0% TO 1%	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

● Naphtha (petroleum), light alkylate	64741-66-8	70% TO 100%	Not Listed
● Plumbane, tetraethyl-	78-00-2	< 0.1%	Not Listed
● Ethane, 1,2-dibromo-	106-93-4	< 0.01%	0.1 % de minimis concentration
● Toluene	108-88-3	0% TO 20%	1.0 % de minimis concentration
● Benzene	71-43-2	0% TO 1%	0.1 % de minimis concentration

U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII

● Naphtha (petroleum), light alkylate	64741-66-8	70% TO 100%	Not Listed
● Plumbane, tetraethyl-	78-00-2	< 0.1%	Not Listed
● Ethane, 1,2-dibromo-	106-93-4	< 0.01%	Included in waste streams: F039, K117, K118, K136
● Toluene	108-88-3	0% TO 20%	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151
● Benzene	71-43-2	0% TO 1%	Included in waste streams: F005, F024, F025, F037, F038, F039, K085, K104, K105, K141, K142, K143, K144, K145, K147, K151, K159, K169, K171, K172

U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring

● Naphtha (petroleum), light alkylate	64741-66-8	70% TO 100%	Not Listed
● Plumbane, tetraethyl-	78-00-2	< 0.1%	Not Listed
● Ethane, 1,2-dibromo-	106-93-4	< 0.01%	
● Toluene	108-88-3	0% TO 20%	

- Benzene 71-43-2 0% TO 1%

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% waste number P110
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% waste number U067
- Toluene 108-88-3 0% TO 20% waste number U220
- Benzene 71-43-2 0% TO 1% waste number U019

U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01%
- Toluene 108-88-3 0% TO 20%
- Benzene 71-43-2 0% TO 1%

U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% 0.028 mg/L (wastewater); 15 mg/kg (nonwastewater)
- Toluene 108-88-3 0% TO 20% 0.080 mg/L (wastewater); 10 mg/kg (nonwastewater)
- Benzene 71-43-2 0% TO 1% 0.14 mg/L (wastewater); 10 mg/kg (nonwastewater)

U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01%
- Toluene 108-88-3 0% TO 20%
- Benzene 71-43-2 0% TO 1%

U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% waste number U067
- Toluene 108-88-3 0% TO 20% waste number U220
- Benzene 71-43-2 0% TO 1% waste number U019 (Ignitable waste, Toxic waste)

U.S. - RCRA (Resource Conservation & Recovery Act) - Waste Minimization Priority Chemicals

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% Not Listed
- Toluene 108-88-3 0% TO 20% Not Listed
- Benzene 71-43-2 0% TO 1% Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% carcinogen, initial date 7/1/87
- Toluene 108-88-3 0% TO 20% Not Listed
- Benzene 71-43-2 0% TO 1% carcinogen, initial date 2/27/87

U.S. - California - Proposition 65 - Developmental Toxicity

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% developmental toxicity, initial date 5/15/98
- Toluene 108-88-3 0% TO 20% developmental toxicity, initial date 1/1/91
- Benzene 71-43-2 0% TO 1% developmental toxicity, initial date 12/26/97

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% 0.2 µg/day NSRL (oral); 3 µg/day NSRL (inhalation)
- Toluene 108-88-3 0% TO 20% Not Listed
- Benzene 71-43-2 0% TO 1% 6.4 µg/day NSRL (oral); 13 µg/day NSRL (inhalation)

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% Not Listed
- Toluene 108-88-3 0% TO 20% female reproductive toxicity, initial date 8/7/09
- Benzene 71-43-2 0% TO 1% Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Not Listed
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% male reproductive toxicity, initial date 5/15/98
- Toluene 108-88-3 0% TO 20% Not Listed
- Benzene 71-43-2 0% TO 1% male reproductive toxicity, initial date 12/26/97

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1%
- Ethane, 1,2-dibromo- 106-93-4 < 0.01%
- Toluene 108-88-3 0% TO 20%
- Benzene 71-43-2 0% TO 1%

United States - Rhode Island

Labor

U.S. - Rhode Island - Hazardous Substance List

- Naphtha (petroleum), light alkylate 64741-66-8 70% TO 100% Not Listed
- Plumbane, tetraethyl- 78-00-2 < 0.1% Toxic (skin); Flammable (skin)
- Ethane, 1,2-dibromo- 106-93-4 < 0.01% Toxic (skin); Flammable (skin); Carcinogen (skin)
- Toluene 108-88-3 0% TO 20% Toxic (skin); Flammable (skin)
- Benzene 71-43-2 0% TO 1% Toxic (skin); Flammable (skin); Carcinogen (skin)

Additional Regulatory Information

- **WARNING:** This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

Section 16 - Other Information

- **Preparation Date** 1/4/2011
- **Last Revision Date** 1/4/2011

Disclaimer/Statement of Liability

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Key to abbreviations

NDA = No Data Available