Gasoline Safety Data Sheet

Section 1: Identification

Product Name	Gasoline
Synonyms	Regular Gasoline, Regular Unleaded Gasoline, Motor fuel, Petrol
CAS Number	8006-61-9
Product Use	Use as fuel for gasoline engines. Uses advised against: applications that are not registered and risk assessed.
Distributor/ Supplier	BVI Gas Inc.
Physical Address	Road PR 114 Km 7.0 Benavente Ward Hormigueros, P.R 00660
Postal Address	P.O.Box 883 Cabo Rojo, P.R. 00623
Company Phone Number	Office (787) 935-0212 fax: (787) 649-1119
Email:	www.bvigas.com msdsrequest@bvigas.com
Emergency Phone Number	**787-649-1119**

Section 2: Hazard Identification

Classification of the substance or mixture	Extremely flammable liquid and vapor

Hazard Classification: Health	H315 -	Skin corrosion/irritation	Category 2
	H319	Eye Irritant	Category 2B
	H340	Germ cell mutagenicity	Category 1B
	H350	Carcinogenicity	Category 1B
	H361	Reproductive toxicity	Category 2

	H336	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	H373	Specific target organ toxicity, repeated exposure (liver)	Category 2
	H304	Aspiration hazard	Category 1

Hazard Classification: Physical	H224 Flammable Liquid - Category 1
Hazard Classification: Environmental	H411- Hazardous to the aquatic environment long-term hazard Category 2
Signal Word	**DANGER**
Symbols (Pictograms)	
Other Hazards Which Do Not Result In Classification	Electrostatic charges may be generated during handling. Electrostatic discharge may cause fire. Liquid evaporates quickly and can ignite leading to a flash fire, or an explosion in a confined space.

Hazard Statement	Precautionary Statement
H225: Highly flammable liquid and vapor. H304: May be fatal if swallowed and enters airways. H315: Causes skin irritation. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness. H340: May cause genetic defects. H350: May cause cancer. H361: Suspected of damaging fertility or the unborn child. H372: Causes damage to organs (Eyes, Blood) through prolonged or repeated exposure. H373: May cause damage to organs (Auditory organs, Nervous system) through prolonged or repeated exposure. H373: May cause damage to organs (Auditory organs) through prolonged or repeated exposure if inhaled.	**Prevention**: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P260 Do not breathe dust/fume/gas/mist/vapor/spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. **Response**: P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P331 Do NOT induce vomiting. P332 + P313 If skin irritation occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. **Storage**: P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. **Disposal**: P501 Dispose of contents/ container to an approved waste disposal plant.

Section 3. Composition/ Information on Ingredients		
Chemical Identity	**CAS Number**	**Concentration (% by weight)**
Gasoline	8006-61-9	10 - 30%
Toluene	108-88-3	10 - 30%
Xilene	1330-20-7	10 - 30%
Ethanol, Ethyl alcohol	64-17-5	0 - 8.2
Trimethylbencene	25551-13-7	1-5%
Isopenthane	78-78-4	1-5%
Naphtalene	91-20-3	1-5%
Bencene	71-43-2	<1.3
Pentane	109-66-0	1-5%
Ciclohexane	110-82-7	1-5%
Ethylbencene	100-41-4	1-5%
Butane	106-97-8	1- 20%
Heptane (isomers)	142082-5	0.5 - 0.75%
N- Hexane	110-54-3	0.5 - 0.75%

Section 4. First Aid Measures	
Eye	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention.
Skin	Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.
Ingestion	Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Do not give mouth-to-mouth resuscitation. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.

Acute Symptoms And Effects	***Eye contact:*** Causes serious eye irritation. ***Inhalation***: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. ***Skin Contact:*** Causes skin irritation. ***Ingestion*** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
Delayed Symptoms And Effects	***Eye contact:*** pain or irritation; watering; redness, corneal damage ***Inhalation***: respiratory tract irritation; coughing; nausea or vomiting; headache; drowsiness/ fatigue; dizziness/vertigo; unconsciousness, narcosis, cyanosis (blue tissue condition, nails, lips, and/or skin). Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash. ***Skin Contact:*** irritation; redness; dryness; cracking ***Ingestion***: nausea or vomiting
Immediate Medical Attention And Special Treatment	**Notes to physician** : Treat symptomatically. This material (or a component) sensitizes the myocardium to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. ***Ingestion***: This material represents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. ***Skin***: Leaks or accidents involving high-pressure equipment may inject a stream of material through the skin and initially produce an injury that may not appear serious. Only a small puncture wound may appear on the skin surface but, without proper treatment and depending on the nature, original pressure, volume, and location of the injected material, can compromise blood supply to an affected body part. Prompt surgical debridement of the wound may be necessary to prevent irreversible loss of function and/or the affected body part. High pressure injection injuries may be serious medical emergencies . ***Specific treatments*** : Administration of sympathomimetic drugs should be avoided.
Pre-Existing Medical Conditions Which May Be Aggravated By Exposure	Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis (rash). Chronic respiratory disease, liver or kidney dysfunction, or pre-existing central nervous system disorders may be aggravated by exposure.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment. ***For small fires,*** Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. ***For large fires***, water spray is recommended to cool or protect exposed materials or structures. fog or foam (AFFF/ATC) can be used. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

Unsuitable Extinguishing Media	Do not use direct water jets on the burning product as they could cause a steam explosion and spread of the fire
Fire Fighting Procedures	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special Protective Actions For Firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Vapors may form explosive air mixtures even at room temperature. Prevent buildup of vapors or gases to explosive concentrations. Some of these materials, if spilled, may evaporate leaving a flammable residue. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.
Unusual Fire And Explosion Hazards	*Flammability Properties:* < -45°C (-49°F) [closed cup] *Auto Ignition Temperature:* >280°C. *Flammability Limits:* (% by Volume in air) Lower 1.4 Upper 7.6 Vapor may cause flash fire. Vapors can flow along surfaces to distant ignition source and flash back. Sensitive to static discharge.
Combustion Products	Decomposition products may include the following materials: carbon dioxide carbon monoxide , and unidentified organic compounds.

Section 6. Accidental Release Measures	
For Non Emergency Personnel	
Personal Precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Protective Equipment	Wear appropriate respirator when ventilation is inadequate. Use personal protection measures as recommended in ***Section 8*** of the SDS for Personal Protective Equipment.
Emergency Procedures	Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center (phone number 800-424-8802). Cellular phones and other electronic devices may have the potential to emit electrical charges (sparks). Sparks in potentially explosive atmospheres if sufficient flammable vapors are present. Therefore, turn off cellular phones and other electronic devices when working in potentially explosive atmospheres or keep devices inside your vehicle .
Evacuation Instructions	Evacuate the area of all non-essential personnel.
For Emergency Personnel	
Protective Equipment	See section 8 of this Safety Data Sheet. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Environmental Precautions	This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.

Methods And Materials For Containment And Clean Up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Use non-sparking tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. **Land spills** ***Small Spills:*** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste. ***Large Spills:*** Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system. Should not be released into the environment. Place contaminated materials in disposable containers and dispose of it in a manner consistent with applicable regulations. **Water spills** Even a small release, if not quickly cleaned up, can contaminate large volumes of surface or groundwater. Personnel handling, transferring or dispensing this product should be trained to respond immediately to any spills or leaks to prevent contamination of groundwater.

Section 7. Handling and Storage

Safe Handling Precautions	This product presents an extreme fire hazard. Liquid quickly evaporates, even at low temperatures and form vapor (fumes) which can catch fire and burn with explosive violence invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Never siphon gasoline by mouth. Use only as motor fuel. Do not use for cleaning pressure appliance fuel, or any other such use. Do not store in open or unlabeled containers. Do not get in eyes, on skin, or in clothing. Do not taste or swallow. Do not breath vapors or fumes. Wash thoroughly after handling.
	Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not by themselves be sufficient. Review all operations that may have the potential of generating an accumulation of electrostatic charge and/ or flammable atmosphere (including tank and tank containing filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. Only dispense gasoline into approved and properly labeled gasoline containers. Always place portable containers on the ground. Be sure pump nozzle is in contact with the container while filling. Do not use a nozzle's lock pen device. Do not fill portable containers the are inside the vehicle or truck/trailer bed. *For more information: refer to National Fire Protection Association (NFPA 77) "Recommended Practice on Static Electricity"* and/or *American Petroleum Institute (API) Recommended Practice 2003 Protection Against Ignitions Arising Out of Static, Lighting or Stray Currents".*

Hygiene Practices	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Minimization of Releases to the Environment	Avoid contamination of soil or releasing this material into sewage and drainage systems and bodies of water.
Safe Storage Conditions	Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. ***Container warning:*** Container is not designed to contain pressure. Do not use pressure empty container or it mat rupture with explosive force. Empty containers retain product residue (solid, liquid and or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should completely drained, properly closed and promptly returned to a drum reconditioned or disposed of properly.
Incompatible Materials	Separate from oxidizing materials.

Section 8. Exposure Controls / Personal Protection

Exposure Control Limits

	OSHA	**ACGIH**	**NIOSH**
Gasoline	TWA: 300ppm STEL 500ppm	TLV: 300ppm STEL: 500ppm	Recommends that exposure to occupational carcinogens be limited to the lowest feasible concentration.
Toluene	TWA: 200 ppm STEL: 300 ppm Ceiling: 500ppm 10 min.	TLV: 20ppm	REL: 100ppm 10hr STEL: 150ppm
Xylene	TWA: 100ppm STEL: 150ppm	TLV: 100ppm STEL: 150ppm	TWA: 100ppm STEL: 150ppm IDLH: 900 ppm
Ethanol, Ethyl alcohol	TWA: 1000ppm	TLV: 1000 ppm 8 hours.	TWA: 1000 ppm 8 hours. IDLH: 15000ppm
Trimethyl benzene	TWA: 25ppm	TLV: 25ppm	TWA: 25ppm
Isopentane 2 Methylbutane	TWA:1000ppm	TLV: 600 ppm 8 hours	REL : 120 ppm 10hr STEL: 610 ppm

Naphtalene	TWA: 10ppm STEL: 15ppm	TWA: 10ppm STEL: 15ppm	TWA: 10ppm STEL: 15ppm IDLH: 250ppm
Benzene	TWA: 1ppm STEL: 5ppm	TLV : 0.5 ppm STEL: 2.5ppm	REL: 0.1ppm STEL:1ppm
Pentane	TWA: 1000ppm	TLV: 600ppm	REL: 120ppm STEL: 610ppm
Cyclohexane	TWA:300ppm	TLV: 100ppm	REL: 300ppm 10hr
Ethyl bencene	TWA: 100ppm	TLV: 20ppm	REL: 100ppm 10hr STEL: 125ppm
Butane	TWA: 800ppm	TLV: 800ppm	REL: 800ppm 10hr
Heptane (isomers)	TWA: 500ppm	TLV: 400ppm STEL: 500ppm	REL: 85ppm 10 hr STEL: 440ppm
N- Hexane	TWA: 500ppm	TLV: 50ppm	REL: 50ppm

Engineering Controls	Use only with adequate ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Personal Protective Equipment	
Eye / Face Protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Respiratory Protection	A NIOSH/ MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-2015, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection. Use a NIOSH/ MSHA-approved positive-pressure supplied-air respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Skin Protection	**Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. **Body Protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti- static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Special Requirements For Personal Protective Equipment	If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, personal protective equipment (PPE) is recommended. A hazard assessment of the work should be conducted by a qualified professional to determine what PPE is required.

Section 9. Physical And Chemical Properties

Physical State	Liquid
Color	Transparent, clear to amber or red
Odor	Pungent, gasoline
Odor Threshold	0.5 - 1.1 ppm
pH	Not available
Vapor Pressure	5-8 psi 100° F, (38° C)
Vapor Density	3-4 (air=1)
Specific Gravity	0.76g/ml at 59°F (15°C)
Melting Point	N/A
Freezing Point	About -101°C (-150°F)
Solubility(ies)	Negligible
Initial Boiling Point and Boiling Range	37.8°C (100°F)- 170°C (338°F)
Flash Point	-49° F / -45° C
Evaporation Rate	Not established
Flammability (Solid, Gas)	Extremely Flammable liquid and vapors

Flammability/Explosion Limit	Upper Flammability limit 7.6 %(V) Lower Flammability limit 1.3 %(V)
Partition Coefficient: n-octanol/water	2 – 7 as log Pow
Auto Ignition Temperature	Approximately 250°C (480°F)
Decomposition Temperature	Data not available
Viscosity	Kinematic (40°C (104°F)): 0.0064 cm^2/s (0.64 cSt)

Section 10: Stability and Reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical Stability	Stable under normal conditions.
Posibility of Hazardous Reaction	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions that Should be Avoided	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatibles Materials	Reactive or incompatible with the following materials: oxidizing materials
Hazardous Decomposition Products	Hazardous decomposition products are not expected to form during normal storage. Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

Section 11: Toxicological Information

Basis for Assessment	Information given is based on product data, a knowledge of the components and the toxicology of similar products.
Acute Toxicity	**Oral** : Low toxicity:LD50 >2000 mg/kg, Rat Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal. **Dermal**: Low toxicity:LD50 >2000 mg/kg, Rat **Inhalation**: Low toxicity: LC50 >5 mg/l / 4.00 h, Rat High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Skin Corrosion / Irritation	Irritating to skin.
Serious Eye Damage / Irritation	Moderately irritating to eyes (but insufficient to classify).

Respiratory or Skin Sensitization	Based on human experience, breathing of vapours or mists may cause a temporary burning sensation to nose, throat and lungs. Not a skin sensitiser.
Germ Cell Mutagenicity	May cause heritable genetic damage. (Benzene) Mutagenicity studies on gasoline and gasoline blending streams have shown predominantly negative results.
Carcinogenicity	Known human carcinogen. Studies in humans and animals have shown that gasoline contains a number of cancer-causing and toxic chemicals such as benzene, toluene, ethylbenzene, xylenes, and others. Epidemiological studies in humans provide important evidence of potential increased risk of leukemia, lymphatic tissue cancers, cancers of the brain, liver, and other organs and tissues
Reproductive toxicity	Suspected of damaging fertility. Based on component information. No evidence of developmental toxicity was found in pregnant laboratory animals (rats , mice) exposed to high concentrations of unleaded gasoline and petroleum naphthas via inhalation.
Teratogenicity/ Embryo Toxicity	Suspected of damaging the unborn child, reduced fetal weight; skeletal malformations
STOT - Single Exposure	May cause drowsiness and dizziness.
STOT - Repeated Exposure	Repeated over-exposure may cause liver and kidney injuries. Components of the product may affect the nervous system. IARC has determined that gasoline and gasoline exhaust are possibly carcinogenic in humans. Inhalation exposure to completely vaporized unleaded gasoline caused kidney cancers in male rats and liver tumors in female mice. The U.S. EPA has determined that the male kidney tumors are species-specific and are irrelevant for human health risk assessment. The significance of the tumors seen in female mice is not known. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with effects to the central and peripheral nervous systems, liver, and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain.
Aspiration Hazard	Aspiration Hazard- Category 1
Routes of Exposure	Routes of entry anticipated: Oral, Dermal, Inhalation.
Short and Long Term Exposure Effects	This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as plastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

Medical Conditions Aggravated by the Exposure	Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest. Prolonged and repeated exposures to high concentrations have resulted in hearing loss in rats. Abuse of vapors has been associated with organ damage and death. May cause MDS (Myelodysplastic Syndrome). (Benzene)

Section 12. Ecological information

Toxicity on Aquatic/ Terrestrial Organisms	96 hour(s) LC50 for rainbow trout (Oncorhynchus mykiss) is 2.7 mg/l 48 hour(s) LC50 for water flea (Daphnia magna is 3.0mg/l 96 hour(s) LC50 for sheepshead minnow (Cipronodon variegatus) is 8.3mg/l 96 hour(s) LC50 for mysid shrimp (Mysidopsis bahia) is 1.8 mg/l
Persistence and/or degradation	Major constituents are expected to be inherently biodegradable. The volatile constituents will oxidize rapidly by photochemical reactions in air.
Bioaccumulation Potential	Log Koa values measured for the hydrocarbon components of this material range from 3 to greater than 6 and therefore are regarded having the potential to bioaccumulate . In practice, metabolic processes or physical properties may prevent this effect or limit bioavailability .
Mobility in Soil	Floats on water. Evaporates within a day from water or soil surfaces. Large volumes may penetrate soil and could contaminate groundwater. Contains volatile constituents.
Other Adverse Environmental Effects	Films formed on water may affect oxygen transfer and damage organisms.

Section 13: Disposal Considerations

Appropriate Disposal Methods	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Do not dispose into the environment, in drains or in water courses. Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination.
Appropriate Disposal Containers to Use	Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally.
Physical and Chemical Properties that May Affect Disposal	Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container.

Language Discouraging Sewage Disposal	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for Landfill and Incineration Activities	Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

Section 14: Transport Information

Land (USDOT)	
UN /NA Number	1203
UN Proper Shipping Name	Gasoline
Hazard Class and/or Division	3
Packing Group	II
Bulk Transportation Guidance	49 CFR 173.242
Environmental Hazards : Marine Pollutant	No
Placard “GASOLINE" placard can be used in a cargo tank or portable tank that carries gasoline on the road.	

Sea (IMGD)	
UN /NA Number	1203
UN Proper Shipping Name	Gasoline
Hazard Class and/or Division	3
Packing Group	II
Environmental Hazards : Marine Pollutant	No
Special Precautions : EmS Guide	Fire (F-E) - Spill (S-E)
Transport in bulk	Covered under MARPOL 73/78, Annex I.
Placard	

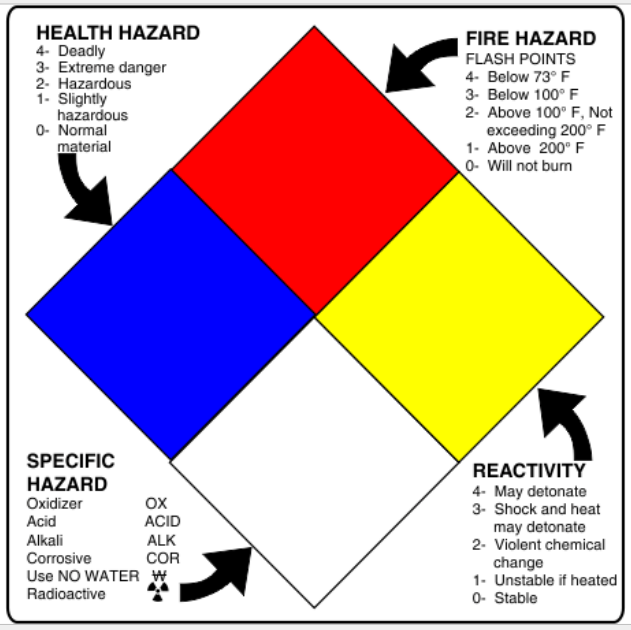
Air (IATA)	
UN /NA Number	1203
UN Proper Shipping Name	Gasoline
Hazard Class and/or Division	3
Packing Group	II
Packaging Instructions	*Passenger Aircraft:* LTD QTY max 1 L. Packaging instructions: Y341. Passenger Air max ** 5L *Cargo Aircraft* : Packing instruction 364 Cargo Air max 30L Special provision A100 (** Packages must not exceed 30 kg gross weight)
Placard	

Section 15: Regulatory Information

OSHA US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	**Benzene** (CAS 71-43-2) Cancer Central nervous system Blood Aspiration Skin Eye Respiratory tract irritation Flammability
RCRA Hazardous Waste Number/Classification:	Non Listed
CERCLA Reportable Quantity:	Benzene (CAS 71-43-2) Gasoline (CAS 8006-61-9) Gasoline, motor fuel (CAS 86290-81-5)
Superfund Amendments and Reauthorization Act of 1986 (SARA)	Immediate (Acute) Health Effects: Yes Delayed (Chronic) Health Effects: Yes Fire Hazard: Yes Sudden Release of Pressure Hazard: No Reactivity Hazard: No
SARA 302 Extremely Hazardous Substance	No
SARA 311/312 Hazardous Chemical	No

SARA 313 Toxic Chemical Release Inventory:	This product may contain component(s), which if in exceedance of the de minimus threshold, may be subject to the reporting requirements of SARA Title III Section 313 Toxic Release Reporting (Form R). *Name* *CERCLA/SARA 313 Emission reporting:* Gasoline. None Benzene 0.1 % de minimis concentration Ethylbenzene 0.1 % de minimis concentration Naphthalene 0.1 % de minimis concentration
Clean Air Act, Section 112 (b) Hazardous Air Pollutants **Clean Air Act Section 602 Class I Substances** **Clean Air Act Section 602 Class II Substances**	Listed Non Listed Non Listed
Clean Water Act	307 : 311- Benzene ; Naphthalene
United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory	*On inventory (yes/no)* No

Section 16: Other Information

Preparation Date	December 30, 2019
Last Revision Date	April 12, 2017
Changes Performed	New format and updated information.
NFPA Classification 	
Emergency Response Guide	**#128**

Abbreviations and acronyms:	CAS: Chemical Abstract Service OSHA: Occupational Safety and Health Administration MSHA: Mine Safety and Health Administration USEPA: United States Environmental Protection Agency USDOT: United States Department of Transportation NFPA: National Fire Protection Association AGCIH: American Conference of Governmental Industrial Hygienists NIOSH: National Institute for Occupational Safety and Health STOT “Specific Target Organ Toxicity”. UN: United Nations NA: North America TSCA: Toxic Substances Control Act RCRA: Resource Conservation and Recovery Act SARA: Superfund Amendments and Reauthorization Act IMGD: International Maritime Dangerous Goods IATA: International Air Transport Association MARPOL: International Convention for the Prevention os Pollution from Ships CERCLA:Comprehensive Environmental Response and Liability Act bw: by weight ppm: parts per million LD50: Lethal Dose LC50: Lethal Concentration TLV: Threshold Limit Value TWA Time Weighted Average REL: Recommended Exposure Limit PEL; Permissible Exposure Limit STEL: Short Term Exposure Limit IDLH: Immediately Dangerous to Life and Health NTP:National Toxicology Program mg/kg: Milligram per kilogram AFFF : Aqueous Film Forming Foam

DISCLAIMER: The information contained in this Safety Data Sheet is based on the data available to us at this time, and is believed to be accurate based upon that: It is provided independently of any sale of the product, for purpose of hazard communication. It is not intended to constitute product performance information and no express or implied warranty of any kind is made with respect to the product, underlying data or the information contained herein, You are urged to obtain data sheets for all the products you buy, process, use or distribute and are encouraged to advise those who may come in contact with such products of the information contained herein.

End of Safety Data Sheet