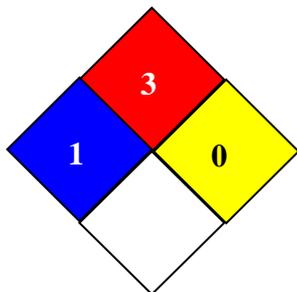




Jordan Petroleum Refinery Company LTD.
Safety and Environment Department
Material Safety Datasheet : Gasoline (All grades)

NFPA Classification :

JPRC PR-02



Flammability	3
Health	1
Reactivity	0

Section 1: Product and Company Identification

Product Name :	Gasoline (All grades)
MSDS Number:	JPRC PR-02
Company:	Jordan Petroleum Refinery Company LTD. Amman – Jordan. TEL: + 962 6 4630151 or 4657600 FAX: + 962 6 4657934 or 4657939 P.O.BOX: 3396 Amman 11181 – Jordan P.O.BOX: 1079 Amman 11118 – Jordan Website: http://www.jopetrol.com.jo E-mail: addewan@jopetrol.com.jo

Section 2: Composition / Information on ingredients

Component	CAS Number	%
Gasoline, Low boiling point Naphtha	86290-81-5	85-100
Methyl tertiary butyl ether	4-04-1634	0.0 – 15% (for gasoline 95)

Section 3: Hazard Identification

- Potential acute health effects
 - Eye contact : Moderate irritant.
 - Skin contact : Practically non-toxic if absorbed following acute (single) exposure .May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are exposed repeatedly.
 - Inhalation : Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.
- **Chronic Effect:** Contains benzene AND MTBE , Both considered carcinogen. They have the potential to cause anemia and other blood diseases, including leukemia, after repeated and prolonged exposure.



- **Warning:** the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

Section 4: First Aid Measures

- Eye contact : In case of contact with eyes, immediately flush with clean water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.
- Skin contact : Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water. Obtain medical attention if irritation or redness develops.
- Inhalation : Remove person to fresh air. If person is not breathing, ensure an open airway and provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

Section 5: Firefighting Measures

- Suitable extinguishing media : SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO₂, water spray, fire fighting foam.
LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.
- Fire and explosion hazards : Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. Flowing product may be ignited by self-generated static electricity. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Section 6: Accidental Release Measures

- For non-emergency personnel : 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.
- Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment.



Large spill

- Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, waterways, basements or confined areas. Wash spillages into an effluent treatment plant. Contain and collect spillage with non-combustible, absorbent material (e.g. sand) and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

Section 7: Handling and storage

Handle as a flammable liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

STORAGE PRECAUTIONS:

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition. Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials.

Section 8: Exposure controls / Personal protection

- Occupational exposure limit of Gasoline : ACGIH TLV (United States, 3/2017).
TWA: 300 ppm 8 hours.
TWA: 890 mg/m³ 8 hours.
STEL: 500 ppm 15 minutes.
STEL: 1480 mg/m³ 15 minutes.
- Appropriate engineering controls : Use only with adequate ventilation. 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.
- Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Hands 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 antistatic 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.
- Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9: Physical and Chemical Properties

- Physical state : Liquid
- Color : Clear to Amber
- Flash point : -40 °C
- Lower and upper explosive (flammable) limits : Lower: 1.4%
Upper: 7.6%
- Vapor pressure : 350-760 mm Hg at 37.8°C (100°F)
- Viscosity : Kinematic (40°C (104°F)): 0.0064 cm²/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 : The product is stable
- Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid : 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.



Section 11: Toxicological information

Product/ ingredient name	Result	Species	Dose
Gasoline	LC50 Inhalation Vapor LD50 Dermal LD50 Oral	Rat Rabbit Rat	>5.2 mg/l (4 hours) >2000 mg/kg >5000 mg/kg

Section 12: Ecological information

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable under local regulations.

Section 13: Disposal Considerations

Disposal of waste material must be performed in accordance with Ministry of Environment regulations.

Section 14: Transport information

Transport of this product is carried out in compliance with local legislation, taking into account safety and environmental precautions.



Section 15: Regulatory information

OSHA Hazard Communication Standard: This product has been evaluated and determined to be hazardous as defined in OSHA's Hazard Communication Standard.

Section 16: Other information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Prepared by : Safety and Environment Department
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