

SAFETY DATA SHEET

Western Refining Gasoline (All Grades)



Section 1. Identification

GHS product identifier : Western Refining Gasoline (All Grades)
Other means of identification : Regular Unleaded Gasoline, Midgrade Unleaded Gasoline, Premium Unleaded Gasoline, Ethanol-Enhanced Gasoline, Precertified Gasoline

Relevant identified uses of the substance or mixture and uses advised against

This SDS applies to: Federal Reformulated Gasoline, California Reformulated Gasoline, Wintertime Oxygenated Gasoline, Low RVP Gasoline and Conventional Gasoline.

Supplier's details : Western Refining Company LP
 123 W. Mills Avenue
 El Paso, TX 79901
 Tel: 915-534-1488

Emergency telephone number (with hours of operation) : CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3877 (24/7)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2
 SKIN CORROSION/IRRITATION - Category 2
 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
 GERM CELL MUTAGENICITY - Category 1B
 CARCINOGENICITY - Category 1A
 TOXIC TO REPRODUCTION [Fertility] - Category 2
 TOXIC TO REPRODUCTION [Unborn child] - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
 ASPIRATION HAZARD - Category 1
 AQUATIC TOXICITY (ACUTE) - Category 3
 AQUATIC TOXICITY (CHRONIC) - Category 2

GHS label elements

Hazard pictograms :



Signal word : Danger

Section 2. Hazards identification

- Hazard statements** :
- Highly flammable liquid and vapor.
 - Causes serious eye irritation.
 - Causes skin irritation.
 - May cause genetic defects.
 - May cause cancer.
 - Suspected of damaging fertility or the unborn child.
 - May be fatal if swallowed and enters airways.
 - May cause drowsiness and dizziness.
 - Causes damage to organs through prolonged or repeated exposure.
 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

- : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response

- : Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs: Get medical attention. 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 attention.

Storage

- : Store locked up. Store in a well-ventilated place. Keep cool.

Disposal

- : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified

- : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Regular Unleaded Gasoline, Midgrade Unleaded Gasoline, Premium Unleaded Gasoline, Ethanol-Enhanced Gasoline, Precertified Gasoline

CAS number/other identifiers

CAS number : Not applicable.

Product code : Not available.

Ingredient name	%	CAS number
Gasoline	90 - 100	86290-81-5
Contains:		
Xylene	0.5 - 15	1330-20-7
Toluene	0.5 - 15	108-88-3
Ethyl Alcohol	0.1 - 10	64-17-5
n-Hexane	0.5 - 5	110-54-3
Benzene	0.1 - 4.9	71-43-2
1,2,4-Trimethylbenzene	0.5 - 4	95-63-6
Ethylbenzene	0.1 - 3	100-41-4
Naphthalene	0.1 - 2	91-20-3

Section 3. Composition/information on ingredients

Cumene

0 - 0.1

98-82-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if symptoms occur.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.
- Skin contact** : Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Section 4. First aid measures

- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet or water-based fire extinguishers.

- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Special protective actions for fire-fighters** : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

- Spill** : 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, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : 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. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. 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. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

United States

Ingredient name	Exposure limits
Gasoline	<p>ACGIH TLV (United States, 3/2012). TWA: 300 ppm 8 hours. TWA: 890 mg/m³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 1480 mg/m³ 15 minutes.</p>
Xylene	<p>ACGIH TLV (United States, 3/2012). STEL: 651 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. TWA: 100 ppm 8 hours. OSHA PEL (United States, 6/2010). TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.</p>
Toluene	<p>NIOSH REL (United States, 6/2009). STEL: 560 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 375 mg/m³ 10 hours. TWA: 100 ppm 10 hours. OSHA PEL Z2 (United States, 11/2006). AMP: 500 ppm 10 minutes. CEIL: 300 ppm TWA: 200 ppm 8 hours. ACGIH TLV (United States, 3/2012). TWA: 20 ppm 8 hours.</p>
Ethyl Alcohol	<p>ACGIH TLV (United States, 3/2012). STEL: 1000 ppm 15 minutes. NIOSH REL (United States, 6/2009). TWA: 1900 mg/m³ 10 hours. TWA: 1000 ppm 10 hours. OSHA PEL (United States, 6/2010). TWA: 1900 mg/m³ 8 hours. TWA: 1000 ppm 8 hours.</p>
n-Hexane	<p>ACGIH TLV (United States, 3/2012). Absorbed through skin. TWA: 50 ppm 8 hours. NIOSH REL (United States, 6/2009). TWA: 180 mg/m³ 10 hours. TWA: 50 ppm 10 hours. OSHA PEL (United States, 6/2010). TWA: 1800 mg/m³ 8 hours. TWA: 500 ppm 8 hours.</p>
Benzene	<p>ACGIH TLV (United States, 3/2012). Absorbed through skin. STEL: 8 mg/m³ 15 minutes. STEL: 2.5 ppm 15 minutes. TWA: 1.6 mg/m³ 8 hours. TWA: 0.5 ppm 8 hours. NIOSH REL (United States, 6/2009). STEL: 1 ppm 15 minutes. TWA: 0.1 ppm 10 hours. OSHA PEL (United States, 6/2010). STEL: 5 ppm 15 minutes. TWA: 1 ppm 8 hours. OSHA PEL Z2 (United States, 11/2006). AMP: 50 ppm 10 minutes. CEIL: 25 ppm TWA: 10 ppm 8 hours.</p>
1,2,4-Trimethylbenzene	<p>ACGIH TLV (United States, 3/2012). TWA: 123 mg/m³ 8 hours. TWA: 25 ppm 8 hours. NIOSH REL (United States, 6/2009). TWA: 125 mg/m³ 10 hours. TWA: 25 ppm 10 hours.</p>

Section 8. Exposure controls/personal protection

Ethylbenzene	<p>OSHA PEL 1989 (United States, 3/1989). TWA: 25 ppm 8 hours. TWA: 125 mg/m³ 8 hours.</p> <p>ACGIH TLV (United States, 3/2012). TWA: 20 ppm 8 hours.</p> <p>NIOSH REL (United States, 6/2009). STEL: 545 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 435 mg/m³ 10 hours. TWA: 100 ppm 10 hours.</p> <p>OSHA PEL (United States, 6/2010). TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.</p>
Naphthalene	<p>ACGIH TLV (United States, 3/2012). Absorbed through skin. STEL: 79 mg/m³ 15 minutes. STEL: 15 ppm 15 minutes. TWA: 52 mg/m³ 8 hours. TWA: 10 ppm 8 hours.</p> <p>NIOSH REL (United States, 6/2009). STEL: 75 mg/m³ 15 minutes. STEL: 15 ppm 15 minutes. TWA: 50 mg/m³ 10 hours. TWA: 10 ppm 10 hours.</p> <p>OSHA PEL (United States, 6/2010). TWA: 50 mg/m³ 8 hours. TWA: 10 ppm 8 hours.</p>
Cumene	<p>ACGIH TLV (United States, 3/2012). TWA: 50 ppm 8 hours.</p> <p>NIOSH REL (United States, 6/2009). Absorbed through skin. TWA: 245 mg/m³ 10 hours. TWA: 50 ppm 10 hours.</p> <p>OSHA PEL (United States, 6/2010). Absorbed through skin. TWA: 245 mg/m³ 8 hours. TWA: 50 ppm 8 hours.</p>

Mexico

Ingredient name	Exposure limits
Gasoline	<p>ACGIH TLV (United States, 3/2012). TWA: 300 ppm 8 hours. TWA: 890 mg/m³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 1480 mg/m³ 15 minutes.</p>
Xylene	<p>NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 435 mg/m³ 8 hours. LMPE-PPT: 100 ppm 8 hours. LMPE-CT: 655 mg/m³ 15 minutes. LMPE-CT: 150 ppm 15 minutes.</p>
Toluene	<p>NOM-010-STPS (Mexico, 9/2000). Absorbed through skin. LMPE-PPT: 188 mg/m³ 8 hours. LMPE-PPT: 50 ppm 8 hours.</p>
Ethyl Alcohol	<p>NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 1900 mg/m³ 8 hours. LMPE-PPT: 1000 ppm 8 hours.</p>
n-Hexane	<p>NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 176 mg/m³ 8 hours. LMPE-PPT: 50 ppm 8 hours.</p>
Benzene	<p>NOM-010-STPS (Mexico, 9/2000). LMPE-CT: 16 mg/m³ 15 minutes. LMPE-CT: 5 ppm 15 minutes. LMPE-PPT: 3.2 mg/m³ 8 hours. LMPE-PPT: 1 ppm 8 hours.</p>
1,2,4-Trimethylbenzene	<p>NOM-010-STPS (Mexico, 9/2000). LMPE-CT: 170 mg/m³ 15 minutes. LMPE-CT: 35 ppm 15 minutes. LMPE-PPT: 125 mg/m³ 8 hours. LMPE-PPT: 25 ppm 8 hours.</p>

Section 8. Exposure controls/personal protection

Ethylbenzene	NOM-010-STPS (Mexico, 9/2000). LMPE-CT: 545 mg/m ³ 15 minutes. LMPE-CT: 125 ppm 15 minutes. LMPE-PPT: 435 mg/m ³ 8 hours. LMPE-PPT: 100 ppm 8 hours.
Naphthalene	NOM-010-STPS (Mexico, 9/2000). LMPE-CT: 75 mg/m ³ 15 minutes. LMPE-CT: 15 ppm 15 minutes. LMPE-PPT: 50 mg/m ³ 8 hours. LMPE-PPT: 10 ppm 8 hours.

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.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

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.

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.

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.

Respiratory protection : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Colorless to yellow.

Odor : Petroleum.

Odor threshold : Not available.

Section 9. Physical and chemical properties

pH	: Not available.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: <-40°C (<-40°F) [Tagliabue.]
Burning time	: Not applicable.
Burning rate	: Not applicable.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1.3% Upper: 7.6%
Vapor pressure	: 34.5 to 103.4 kPa (258.55 to 775.66 mm Hg) [20°C] (5 psi - 15 psi @ 37.8°C (100°F))
Vapor density	: 3 to 4 [Air = 1]
Relative density	: 0.7 to 0.8
Solubility	: Insoluble in the following materials: cold water and hot water.
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: 257.22°C (495°F)
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: <1 SUS @ 37.8°C (100°F)

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.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Gasoline	LD50 Oral	Rat	13.6 g/kg	-
Xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Toluene	LC50 Inhalation Vapor	Rat	49 g/m ³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
Ethyl Alcohol	LC50 Inhalation Vapor	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	-
n-Hexane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LD50 Oral	Rat	15840 mg/kg	-
Benzene	LD50 Oral	Rat	930 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Oral	Rat	1400 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
Toluene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	100%	-
	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
Ethyl Alcohol	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Mild irritant	Rabbit	-	870 µg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Pig	-	24 hours 250 µL	-
	Skin - Mild irritant	Rabbit	-	435 mg	-
	Skin - Moderate irritant	Rabbit	-	500 mg	-
	Eyes - Moderate irritant	Rabbit	-	100 µL	-
n-Hexane	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 mg	-
	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	400 mg	-
Benzene	Eyes - Mild irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	88 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
	Eyes - Severe irritant	Rabbit	-	500 mg	-
Naphthalene	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
	Skin - Mild irritant	Rabbit	-	495 mg	-
Cumene	Skin - Severe irritant	Rabbit	-	24 hours 0.05 mL	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 10 mg	-
	Eyes - Mild irritant	Rabbit	-	86 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 mg	-

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

Section 11. Toxicological information

Classification

Product/ingredient name	OSHA	IARC	ACGIH	NTP
Xylene	-	3	A4	-
Toluene	-	3	A4	-
Benzene	+	1	A1	Known to be a human carcinogen.
Ethylbenzene	-	2B	A3	-
Naphthalene	-	2B	A4	Reasonably anticipated to be a human carcinogen.
Cumene	-	2B	-	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 3	Not applicable.	Narcotic effects
n-Hexane	Category 3	Not applicable.	Narcotic effects
1,2,4-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
Cumene	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 2	Not determined	Not determined
n-Hexane	Category 2	Not determined	Not determined
Benzene	Category 1	Not determined	Not determined

Aspiration hazard

Name	Result
Gasoline	ASPIRATION HAZARD - Category 1
Toluene	ASPIRATION HAZARD - Category 1
n-Hexane	ASPIRATION HAZARD - Category 1
Benzene	ASPIRATION HAZARD - Category 1
Cumene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.
- Skin contact** : Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
 pain or irritation
 watering
 redness

Section 11. Toxicological information

- Inhalation** : Adverse symptoms may include the following:
 nausea or vomiting
 headache
 drowsiness/fatigue
 dizziness/vertigo
 unconsciousness
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
 irritation
 redness
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Potential chronic health effects

- General** : Causes damage to organs through prolonged or repeated exposure.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : May cause genetic defects.
- Teratogenicity** : Suspected of damaging the unborn child.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	10837.6 mg/kg
Dermal	7333.3 mg/kg
Inhalation (gases)	33333.3 ppm
Inhalation (vapors)	202 mg/L

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Xylene	Acute IC50 10 mg/L	Algae	72 hours
	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
Toluene	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 433 ppm Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
Ethyl Alcohol	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 500000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute EC50 17.921 mg/L Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 2000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia franchiscana - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/L Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Gambusia holbrooki - Larvae	12 weeks
n-Hexane	Acute LC50 113000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
	Acute EC50 29000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
Benzene	Acute EC50 1600000 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute EC50 9230 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 21000 µg/l Marine water	Crustaceans - Artemia salina - Nauplii	48 hours
	Acute LC50 5.28 ul/L Fresh water	Fish - Oncorhynchus gorbuscha - Fry	96 hours
	Chronic NOEC 1.5 to 5.4 ul/L Marine water	Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling)	4 weeks
	Acute LC50 4910 µg/l Marine water	Crustaceans - Elasmopus pectinicus - Adult	48 hours
	Acute LC50 22.4 mg/L Fresh water	Fish - Tilapia zillii	96 hours
Ethylbenzene	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 2970 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 5200 µg/l Marine water	Crustaceans - Americamysis bahia	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Naphthalene	Chronic NOEC 1000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 1600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 2350 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 213 µg/l Fresh water	Fish - Melanotaenia fluviatilis - Larvae	96 hours
Cumene	Acute EC50 2600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11200 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 7400 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute LC50 2700 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Gasoline	2 to 7	-	high
Xylene	3.16	-	low
Toluene	2.69	8.317637711	low
Ethyl Alcohol	-0.32	-	low
n-Hexane	3.9	-	low
Benzene	2.13	4.265795188	low
1,2,4-Trimethylbenzene	3.8	120.226443461	low
Ethylbenzene	3.1	-	low
Naphthalene	3.3	85.11380382	low
Cumene	3.66	35.481338923	low

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{oc}) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.





Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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 empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
Toluene	108-88-3	Listed	U220
Xylene	1330-20-7	Listed	U239
Benzene	71-43-2	Listed	U019
Naphthalene	91-20-3	Listed	U165

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN1203	UN1203	UN1203
UN proper shipping name	GASOLINE	GASOLINE. Marine pollutant (n-Hexane, Benzene)	GASOLINE
Transport hazard class(es)	3 	3  	3 
Packing group	II	II	II
Environmental hazards	Yes.	Yes.	No.
Additional information	-	Emergency schedules (EmS) F-E, S-E	-

AERG : 128

Section 14. Transport information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR:** Naphthalene
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): Not determined.
Clean Water Act (CWA) 307: Toluene; Benzene; Ethylbenzene; Naphthalene
Clean Water Act (CWA) 311: Toluene; Xylene; Benzene; Ethylbenzene; Naphthalene

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
 Immediate (acute) health hazard
 Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Gasoline	90 - 100	Yes.	No.	No.	No.	No.
Xylene	5 - 15	Yes.	No.	No.	Yes.	No.
Toluene	5 - 15	Yes.	No.	No.	Yes.	Yes.
Ethyl Alcohol	0.1 - 10	Yes.	No.	No.	Yes.	No.
n-Hexane	0.5 - 5	Yes.	No.	No.	Yes.	Yes.
Benzene	0.1 - 4.9	Yes.	No.	No.	Yes.	Yes.
1,2,4-Trimethylbenzene	0.5 - 4	Yes.	No.	No.	Yes.	No.
Ethylbenzene	0.1 - 3	Yes.	No.	No.	Yes.	Yes.
Naphthalene	0.1 - 2	No.	No.	No.	Yes.	Yes.
Cumene	0 - 0.1	Yes.	No.	No.	Yes.	Yes.

Section 15. Regulatory information

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Xylene	1330-20-7	0.5 - 15
	Toluene	108-88-3	0.5 - 15
	n-Hexane	110-54-3	0.5 - 5
	Benzene	71-43-2	0.1 - 4.9
	1,2,4-Trimethylbenzene	95-63-6	0.5 - 4
	Ethylbenzene	100-41-4	0.1 - 3
	Naphthalene	91-20-3	0.1 - 2
Supplier notification	Xylene	1330-20-7	0.5 - 15
	Toluene	108-88-3	0.5 - 15
	n-Hexane	110-54-3	0.5 - 5
	Benzene	71-43-2	0.1 - 4.9
	1,2,4-Trimethylbenzene	95-63-6	0.5 - 4
	Ethylbenzene	100-41-4	0.1 - 3
	Naphthalene	91-20-3	0.1 - 2

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts

: The following components are listed: Toluene; Xylene; Ethyl Alcohol; n-Hexane; Benzene; 1,2,4-Trimethylbenzene; Ethylbenzene; Naphthalene

New York

: The following components are listed: Toluene; Xylene; n-Hexane; Benzene; Ethylbenzene; Naphthalene; Cumene

New Jersey

: The following components are listed: Toluene; Xylene; Ethyl Alcohol; n-Hexane; Benzene; 1,2,4-Trimethylbenzene; Ethylbenzene; Naphthalene; Cumene

Pennsylvania

: The following components are listed: Gasoline; Toluene; Xylene; Ethyl Alcohol; n-Hexane; Benzene; 1,2,4-Trimethylbenzene; Ethylbenzene; Naphthalene; Cumene

California Prop. 65

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

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Toluene	No.	Yes.	No.	7000 µg/day (ingestion) 13000 µg/day (inhalation)
Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)
Ethylbenzene	Yes.	No.	41 µg/day (ingestion) 54 µg/day (inhalation)	No.
Naphthalene	Yes.	No.	Yes.	No.
Cumene	Yes.	No.	No.	No.

Mexico

Classification

:



International regulations

Section 15. Regulatory information

International lists	: Australia inventory (AICS) : All components are listed or exempted. China inventory (IECSC) : Not determined. Japan inventory : Not determined. Korea inventory : All components are listed or exempted. Malaysia Inventory (EHS Register) : Not determined. New Zealand Inventory of Chemicals (NZIoC) : All components are listed or exempted. Philippines inventory (PICCS) : All components are listed or exempted. Taiwan inventory (CSNN) : Not determined.
Chemical Weapons Convention List Schedule I Chemicals	: Not listed
Chemical Weapons Convention List Schedule II Chemicals	: Not listed
Chemical Weapons Convention List Schedule III Chemicals	: Not listed

Section 16. Other information

History

Date of issue mm/dd/yyyy	: 06/30/2013
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Prepared by	: KMK Regulatory Services Inc.
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

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