



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name Denatured Fuel Ethanol
Version # 01
Revision date 12-01-2010
MSDS Number 035
Product use Refinery feedstock.
Synonym(s) See section 16 for complete information.
Manufacturer information Valero Marketing & Supply Company and Affiliates
P.O. Box 696000
San Antonio, TX 78269-6000
General Assistance 210-345-4593
24 Hour Emergency 866-565-5220
1-800-424-9300 (CHEMTREC USA)

2. Hazards Identification

Physical state Liquid.
Appearance Colorless liquid.
Emergency overview DANGER!
Extremely flammable liquid and vapor - vapor may cause flash fire. Will be easily ignited by heat, spark or flames. Heat may cause the containers to explode.

Harmful if inhaled, absorbed through skin, or swallowed. Aspiration may cause lung damage. Irritating to eyes, respiratory system and skin. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Contains benzene. Cancer hazard - can cause cancer. Mutagen. May cause heritable genetic damage. May cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.

Eyes Contact may irritate or burn eyes. Eye contact may result in corneal injury.

Skin Harmful if absorbed through skin. Irritating to skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Inhalation Harmful if inhaled. Irritating to respiratory system. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. May cause breathing disorders and lung damage. May cause cancer by inhalation. Prolonged inhalation may be harmful.

Ingestion Harmful if swallowed. Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis. Irritating to mouth, throat, and stomach.

Target organs Blood. Eyes. Liver. Respiratory system. Skin. Kidneys. Central nervous system.

Chronic effects Cancer hazard. Contains material which may have reproductive toxicity, teratogenic or mutagenic effects. Liver injury may occur. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Signs and symptoms Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. 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.

Potential environmental effects Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

3. Composition / Information on Ingredients

| Components | CAS # | Percent |
|-----------------------|------------|---------|
| Ethanol | 64-17-5 | 95-99 |
| Gasoline (motor Fuel) | 86290-81-5 | 0-5 |
| Gasoline, natural | 8006-61-9 | 0-5 |

4. First Aid Measures

First aid procedures

| | |
|---------------------|---|
| Eye contact | 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. |
| Skin contact | 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. |
| Inhalation | Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get 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. Get medical attention immediately. |

Notes to physician In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General advice If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

5. Fire Fighting Measures

Flammable properties Flammable by OSHA criteria. Containers may explode when heated.

Extinguishing media

| | |
|---------------------------------------|---|
| Suitable extinguishing media | Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). |
| Unsuitable extinguishing media | Do not use a solid water stream as it may scatter and spread fire. |

Protection of firefighters

| | |
|--|--|
| Specific hazards arising from the chemical | Vapor may cause flash fire. Vapors can flow along surfaces to distant ignition source and flash back. Sensitive to static discharge. |
| Protective equipment and precautions for firefighters | Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. |

Fire fighting equipment/instructions 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.

Specific methods In the event of fire and/or explosion do not breathe fumes. Use water spray to cool unopened containers.

Hazardous combustion products Carbon monoxide. Carbon Dioxide. Sulfur oxides. Nitrogen oxides (NO_x). Hydrocarbons.

6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.

Environmental precautions

Gasoline may contain oxygenated blend products (Ethanol, etc.) that are soluble in water and therefore precautions should be taken to protect surface and groundwater sources from contamination. If facility or operation has an "oil or hazardous substance contingency plan", activate its procedures. Stay upwind and away from spill. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not enter or stay in area unless monitoring indicates that it is safe to do so. Isolate hazard area and restrict entry to emergency crew. Extremely flammable. Review Fire Fighting Measures, Section 5, before proceeding with clean up. Keep all sources of ignition (flames, smoking, flares, etc.) and hot surfaces away from release. Contain spill in smallest possible area. Recover as much product as possible (e.g. by vacuuming). Stop leak if it can be done without risk. Use water spray to disperse vapors. Use compatible foam to minimize vapor generation as needed. Spilled material may be absorbed by an appropriate absorbent, and then handled in accordance with environmental regulations. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment or drainage systems and natural waterways. Contact fire authorities and appropriate federal, state and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, contact the National Response Center at 1-800-424-8802. For highway or railways spills, contact Chemtrec at 1-800-424-9300.

Methods for containment

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. 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 for cleaning up

Use non-sparking tools and explosion-proof equipment.

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.

Other information

Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling

Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. The product is extremely flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. When using, do not eat, drink or smoke. Avoid release to the environment.

Storage

Flammable liquid storage. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|---------------------------------------|------|----------|
| Benzene (71-43-2) | STEL | 2.5 ppm |
| | TWA | 0.5 ppm |
| Ethanol (64-17-5) | STEL | 1000 ppm |
| Gasoline (motor Fuel) (86290-81-5) | STEL | 500 ppm |
| | TWA | 300 ppm |

US. OSHA Table Z-2 (29 CFR 1910.1000)

| Components | Type | Value |
|-------------------|---------|--------|
| Benzene (71-43-2) | Ceiling | 25 ppm |
| | STEL | 5 ppm |

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

| Components | Type | Value |
|-------------------|------|------------|
| Ethanol (64-17-5) | TWA | 1 ppm |
| | PEL | 1000 ppm |
| | | 1900 mg/m3 |

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

| Components | Type | Value |
|---------------------------------------|------|------------|
| Benzene (71-43-2) | STEL | 8 mg/m3 |
| | | 2.5 ppm |
| | TWA | 0.5 ppm |
| Ethanol (64-17-5) | | 1.6 mg/m3 |
| | TWA | 1000 ppm |
| Gasoline (motor Fuel) (86290-81-5) | | 1880 mg/m3 |
| | STEL | 500 ppm |
| | TWA | 300 ppm |

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

| Components | Type | Value |
|---------------------------------------|------|----------|
| Benzene (71-43-2) | STEL | 2.5 ppm |
| | TWA | 0.5 ppm |
| Ethanol (64-17-5) | STEL | 1000 ppm |
| Gasoline (motor Fuel) (86290-81-5) | STEL | 500 ppm |
| | TWA | 300 ppm |

Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents)

| Components | Type | Value |
|---------------------------------------|------|------------|
| Benzene (71-43-2) | STEL | 2.5 ppm |
| | TWA | 0.5 ppm |
| Ethanol (64-17-5) | | 1000 ppm |
| | TWA | 1900 mg/m3 |
| Gasoline (motor Fuel) (86290-81-5) | STEL | 500 ppm |
| | TWA | 300 ppm |

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

| Components | Type | Value |
|----------------------------------|------|------------|
| Benzene (71-43-2) | STEL | 15.5 mg/m3 |
| | | 5 ppm |
| | TWA | 1 ppm |
| Ethanol (64-17-5) | | 3 mg/m3 |
| | TWA | 1000 ppm |
| | | 1880 mg/m3 |
| Gasoline, natural (8006-61-9) | STEL | 1480 mg/m3 |
| | | 500 ppm |
| | TWA | 300 ppm |
| | | 890 mg/m3 |

Mexico. Occupational Exposure Limit Values

| Components | Type | Value |
|-------------------|------|------------|
| Benzene (71-43-2) | STEL | 16 mg/m3 |
| | | 5 ppm |
| | TWA | 1 ppm |
| Ethanol (64-17-5) | | 3.2 mg/m3 |
| | TWA | 1000 ppm |
| | | 1900 mg/m3 |

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|---------------------------------------|--|
| Engineering controls | Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment. |
| Personal protective equipment | |
| Eye / face protection | Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles. |
| Skin protection | Wear chemical-resistant, impervious gloves. Full body suit and boots are recommended when handling large volumes or in emergency situations. Flame retardant protective clothing is recommended. |
| Respiratory protection | Use a properly fitted, air-purifying or air-fed 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. If workplace exposure limits for product or components are exceeded, NIOSH approved equipment should be worn. Proper respirator selection should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. This equipment should be available for nonroutine and emergency use. |
| General hygiene considerations | Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practice. |

9. Physical & Chemical Properties

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|---|--|
| Appearance | Colorless liquid. |
| Color | Colorless |
| Odor | Characteristic Gasoline Odor (Strong). |
| Odor threshold | Not available. |
| Physical state | Liquid. |
| Form | Liquid. |
| pH | Not available. |
| Melting point | < -173 °F (< -113.89 °C) |
| Freezing point | Not available. |
| Boiling point | 165 - 175 °F (73.89 - 79.45 °C) |
| Flash point | 50 - 55.4 °F (10 - 13 °C) (closed cup) |
| Evaporation rate | 1.7 (butyl acetate = 1) |
| Flammability limits in air, upper, % by volume | Not available. |
| Flammability limits in air, lower, % by volume | Not available. |
| Vapor pressure | Not available. |
| Vapor density | 1.6 |
| Specific gravity | 0.79 |
| Solubility (water) | Soluble |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | > 689 °F (> 365 °C) |
| Decomposition temperature | Not available. |
| VOC | 100 % |

10. Chemical Stability & Reactivity Information

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| Chemical stability | Stable under normal temperature conditions and recommended use. |
| Conditions to avoid | Heat, flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | Carbon oxides. Sulfur oxides. Nitrogen oxides (NOx). Hydrocarbons. |

Possibility of hazardous reactions

Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Components

Test Results

Ethanol (64-17-5)

Acute Inhalation LC50 Rat: 20000 ppm 10 hr

Acute Oral LD50 Rat: 6.2 g/kg

Acute effects

Harmful if inhaled, absorbed through skin, or swallowed. Harmful: may cause lung damage if swallowed. Irritating to eyes, respiratory system and skin. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea.

Local effects

US ACGIH Threshold Limit Values: Skin designation

Benzene (CAS 71-43-2)

Can be absorbed through the skin.

Sensitization

This substance may have a potential for sensitization which may provoke an allergic reaction among sensitive individuals.

Chronic effects

Repeated exposure of laboratory animals to high concentrations of gasoline vapors has caused kidney damage and cancer in rats and cancer in mice. Gasoline was evaluated for genetic activity in assays using microbial cells, cultured mammalian cells and rat bone marrow cells. The results were all negative so gasoline was considered nonmutagenic under these conditions. Overexposure to this product or its components has been suggested as a cause of liver abnormalities in laboratory animals and humans. Lifetime studies by the American Petroleum Institute have shown that kidney damage and kidney cancer can occur in male rats after prolonged inhalation exposures at elevated concentrations of total gasoline. Kidneys of mice and female rats were unaffected. The U.S. EPA Risk Assessment Forum has concluded that the male rat kidney tumor results are not relevant for humans. Total gasoline exposure also produced liver tumors in female mice only. The implication of these data for humans has not been determined.

Subchronic effects

Subchronic inhalation of benzene by rats produced decreased white blood cell counts, decreased bone marrow cell activity, increased red blood cell activity and cataracts. Blood disorders may occur after prolonged inhalation, prolonged skin contact and/or ingestion. Liver and kidney damage may occur after prolonged and repeated exposure.

Carcinogenicity

ACGIH Carcinogens

Benzene (CAS 71-43-2)

A1 Confirmed human carcinogen.

Ethanol (CAS 64-17-5)

A3 Confirmed animal carcinogen with unknown relevance to humans.

Gasoline (motor Fuel) (CAS 86290-81-5)

A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzene (CAS 71-43-2)

1 Carcinogenic to humans.

Gasoline (motor Fuel) (CAS 86290-81-5)

2B Possibly carcinogenic to humans.

Gasoline, natural (CAS 8006-61-9)

2B Possibly carcinogenic to humans.

US NTP Report on Carcinogens: Known carcinogen

Benzene (CAS 71-43-2)

Known carcinogen.

US OSHA Specifically Regulated Substances: Cancer hazard

Benzene (CAS 71-43-2)

Cancer hazard.

Epidemiology

Contains benzene. Human epidemiology studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-producing system and serious blood disorders, including leukemia. Animal tests suggest that prolonged and/or repeated overexposure to benzene may damage the embryo/fetus. The relevance of these animal studies to humans has not been fully established. Studies have shown a risk of spontaneous abortions in women exposed to high concentrations of organic solvents during pregnancy.

Mutagenicity

In in-vitro experiments, neither benzene, toluene nor xylene changed the number of sister-chromatid exchanges (SCEs) or the number of chromosomal aberrations in human lymphocytes. However, toluene and xylene caused a significant cell growth inhibition which was not observed with benzene in the same concentrations. In in-vivo experiments, toluene changed the number of sister-chromatid exchanges (SCEs) in human lymphocytes. Toluene may cause heritable genetic damage.

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|-----------------------------|---|
| Neurological effects | Chronic exposure to high concentrations of various hydrocarbon blends may lead to polyneuropathy (peripheral nerve damage), characterized by progressive weakness and numbness in the extremities, loss of deep tendon reflexes and reduction of motor nerve conduction velocity. Numerous cases of polyneuritis have been reported following prolonged exposures to a petroleum fraction containing various isomers of heptane as major ingredients. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue) and/or damage. |
| Reproductive effects | Benzene, xylene and toluene have demonstrated animal effects of reproductive toxicity. Animal studies of benzene have shown testicular effects, alterations in reproductive cycles, chromosomal aberrations and embryo/fetotoxicity. Ethanol has demonstrated human effects of reproductive toxicity. May damage fertility or the unborn child. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Avoid exposure to women during early pregnancy. Avoid contact during pregnancy/while nursing. |
| Teratogenicity | Abusive inhalation of toluene ("glue sniffing") has been reported to be associated with birth defects in the offspring of abusers. Rats exposed to benzene and xylene vapor during pregnancy showed embryo/fetotoxic effects. Ethanol has demonstrated human effects of teratogenicity. |
| Further information | Symptoms may be delayed. |

12. Ecological Information

Ecotoxicological data

| Components | Test Results |
|--|--|
| Ethanol (64-17-5) | EC50 Water flea (Daphnia magna): 7.7 - 11.2 mg/l 48 hours LC50 Fathead minnow (Pimephales promelas): > 100 mg/l 96 hours |
| Ecotoxicity | Contains a substance which causes risk of hazardous effects to the environment. |
| Environmental effects | The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. |
| Aquatic toxicity | Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. |
| Persistence and degradability | Not available. |
| Bioaccumulation / Accumulation | No data available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Mobility in environmental media | No data available. |

13. Disposal Considerations

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|------------------------------|---|
| Waste codes | D001: Waste Flammable material with a flash point <140 °F |
| Disposal instructions | Dispose in accordance with all applicable regulations. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. |

14. Transport Information

DOT

Basic shipping requirements:

| | |
|-----------------------------|------------------|
| UN number | UN1987 |
| Proper shipping name | Alcohols, n.o.s. |
| Hazard class | 3 |
| Packing group | II |
| Labels required | 3 |

Additional information:

| | |
|-----------------------------|-------------------------|
| Special provisions | IB2, T7, TP1, TP8, TP28 |
| Packaging exceptions | 150 |
| Packaging non bulk | 202 |
| Packaging bulk | 242 |
| ERG number | 127 |

IATA**Basic shipping requirements:**

UN number 1987
 Proper shipping name Alcohols, n.o.s.
 Hazard class 3
 Packing group II

Additional information:

ERG code 3L

IMDG**Basic shipping requirements:**

UN number 1987
 Proper shipping name ALCOHOLS, N.O.S.
 Hazard class 3
 Packing group II
 EmS No. F-E, S-D

TDG**Basic shipping requirements:**

Proper shipping name ALCOHOLS, N.O.S.
 Hazard class 3
 UN number UN1987
 Packing group II
 Marine pollutant •

Additional information:

Special provisions 16

15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
 All components are on the U.S. EPA TSCA Inventory List.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Benzene (CAS 71-43-2) 0.1 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Benzene (CAS 71-43-2) Listed.

CERCLA (Superfund) reportable quantity (lbs)

Gasoline (motor Fuel) 100
 Gasoline, natural 100

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - Yes
 Pressure Hazard - No
 Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Drug Enforcement Agency (DEA) Not controlled

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status Controlled

WHMIS classification B2 - Flammable/Combustible
 D1A - Immediate/Serious-VERY TOXIC
 D2A - Other Toxic Effects-VERY TOXIC
 D2B - Other Toxic Effects-TOXIC

WHMIS labeling



Inventory status

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

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

US - California Hazardous Substances (Director's): Listed substance

Benzene (CAS 71-43-2) Listed.
Ethanol (CAS 64-17-5) Listed.
Gasoline, natural (CAS 8006-61-9) Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Benzene (CAS 71-43-2) Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Benzene (CAS 71-43-2) Listed: February 27, 1987 Carcinogenic.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Benzene (CAS 71-43-2) Listed: December 26, 1997 Developmental toxin.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Benzene (CAS 71-43-2) Listed: December 26, 1997 Male reproductive toxin.

US - Massachusetts RTK - Substance: Listed substance

Benzene (CAS 71-43-2) Listed.
Ethanol (CAS 64-17-5) Listed.
Gasoline, natural (CAS 8006-61-9) Listed.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

Benzene (CAS 71-43-2) 500 LBS
Gasoline, natural (CAS 8006-61-9) 10000 LBS

US - New Jersey RTK - Substances: Listed substance

Benzene (CAS 71-43-2) Listed.
Ethanol (CAS 64-17-5) Listed.
Gasoline (motor Fuel) (CAS 86290-81-5) Listed.
Gasoline, natural (CAS 8006-61-9) Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Benzene (CAS 71-43-2) Listed.
Ethanol (CAS 64-17-5) Listed.
Gasoline (motor Fuel) (CAS 86290-81-5) Listed.

US - Pennsylvania RTK - Hazardous Substances: Special hazard

Benzene (CAS 71-43-2) Special hazard.

16. Other Information

Further information

HMIS® is a registered trade and service mark of the NPCA.

Other information

Note: This Material Safety Data Sheet applies to the listed products and synonym descriptions for Hazard Communication purposes only. Technical Specifications vary greatly depending on the products and are not reflected in this document. Consult specification sheets for technical information.

HMIS® ratings

Health: 2*
Flammability: 3
Physical hazard: 0

NFPA ratings

Health: 1
Flammability: 3
Instability: 0

Disclaimer

This Material Safety Data Sheet (MSDS) was prepared in accordance with 29 CFR 1910.1200 by Valero Marketing & Supply Co., ("VALERO"). VALERO does not assume any liability arising out of product use by others. The information, recommendations, and suggestions presented in this MSDS are based upon test results and data believed to be reliable. The end user of the product has the responsibility for evaluating the adequacy of the data under the conditions of use, determining the safety, toxicity and suitability of the product under these conditions, and obtaining additional or clarifying information where uncertainty exists. No guarantee expressed or implied is made as to the effects of such use, the results to be obtained, or the safety and toxicity of the product in any specific application. Furthermore, the information herein is not represented as absolutely complete, since it is not practicable to provide all the scientific and study information in the format of this document, plus additional information may be necessary under exceptional conditions of use, or because of applicable laws or government regulations.

Issue date

12-01-2010