WARNING:
Flammable liquid; vapor may cause flash fire.
Harmful or fatal if swallowed - Can enter lungs and cause damage.
Can cause eye, skin or respiratory tract irritation.
Overexposure can cause central nervous system (CNS) depression and/or other target organ effects.
Breathing high concentrations can cause irregular heartbeats which may be fatal.
Harmful to aquatic organisms.

SECTION 1. PRODUCT IDENTIFICATION

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>Solvent Blend 19216</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Number</td>
<td>19216</td>
</tr>
<tr>
<td>CAS Number</td>
<td>Mixture.</td>
</tr>
<tr>
<td>Product Family</td>
<td>Petroleum hydrocarbon solvent</td>
</tr>
<tr>
<td>Synonyms</td>
<td>Petroleum hydrocarbon solvent; CITGO® Material Code No.: 19216; Former Name: Solvent Blend 2216</td>
</tr>
</tbody>
</table>

SECTION 2. COMPOSITION

This product may be composed, in whole or in part, of any of the following refinery streams:

Light hydrocracked distillate (petroleum) [CAS No.: 64741-77-1]
Petroleum hydrocarbon distillates [CAS No.: 8052-41-3]
Light hydrotreated distillate (petroleum) [CAS No.: 64742-47-8]
Heavy hydrotreated naphtha (petroleum) [CAS No.: 64742-48-9]
Light aromatic solvent naphtha (petroleum) [CAS No.: 64742-95-6]

This product contains the following chemicals as components of the refinery streams listed above:

Component Name(s) | CAS Registry No. | Concentration (%)
Solvent Blend 19216

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene, all isomers</td>
<td>1330-20-7</td>
<td>20 - 40</td>
</tr>
<tr>
<td>Trimethylbenzenes, all isomers</td>
<td>25551-13-7</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Ethylmethylbenzene, all isomers</td>
<td>25550-14-5</td>
<td>1 - 15</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>1 - 15</td>
</tr>
<tr>
<td>Nonane, all isomers</td>
<td>Mixture</td>
<td>1 - 15</td>
</tr>
<tr>
<td>n-Propylbenzene</td>
<td>103-65-1</td>
<td>0 - 5</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>0 - 1</td>
</tr>
</tbody>
</table>

SECTION 3. HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

Major Route(s) of Entry  Skin contact. Inhalation.

Signs and Symptoms of Acute Exposure

Inhalation  Breathing high concentrations may be harmful. Mist or vapor can irritate the throat and lungs. Breathing this material may cause central nervous system depression with symptoms including nausea, headache, dizziness, fatigue, drowsiness, or unconsciousness. Breathing high concentrations of this material, for example, in an enclosed space or by intentional abuse, can cause irregular heartbeats which can cause death.

Eye Contact  This material can cause eye irritation with tearing, redness, or a stinging or burning feeling. Further, it can cause swelling of the eyes with blurred vision. Effects may become more serious with repeated or prolonged contact.

Skin Contact  May cause mild skin irritation with redness and/or an itching or burning feeling. Effects may become more serious with repeated or prolonged contact. It is likely that this material is able to pass into the body through the skin and may cause similar effects as from breathing or swallowing it.

Ingestion  Swallowing this material may be harmful. Swallowing this material may cause stomach or intestinal upset with pain, nausea, and/or diarrhea. This material can get into the lungs during swallowing or vomiting. Small amounts in the lungs can cause lung damage, possibly leading to chronic lung dysfunction or death. Swallowing this material may cause effects similar to those described in the inhalation section (see "inhalation" above).

Chronic Health Effects Summary  Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.

Reports have associated repeated and prolonged occupational overexposure to solvents with irreversible brain and nervous system damage (sometimes referred to as "Solvent or Painter’s Syndrome"). Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

This material (or a component) may cause harm to the human fetus based on tests with laboratory animals. This material, or a component of this material, has been shown to cause cancer in laboratory animals. The relevance of this to humans is not clear. See Toxicological Information (Section 11)

Repeated overexposure may cause injury to bone marrow, blood cells, kidney, and liver. Prolonged or repeated overexposure to xylene, a component of this product, has been associated with hearing damage in laboratory animals.

Conditions Aggravated by Exposure  Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin, Respiratory System, Liver, Kidneys, Central Nervous System (CNS), Heart (Cardiac)

Target Organs  May cause damage to the following organs: blood, kidneys, lungs, liver, mucous membranes, heart, upper respiratory tract, skin, auditory system, central nervous system (CNS), eye, lens or cornea
Solvent Blend 19216

Carcinogenic Potential  This material contains ethylbenzene at concentrations at or above 0.1%. Ethylbenzene is considered possibly carcinogenic to humans by IARC (Group 2B) based on laboratory animal studies.

OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).

<table>
<thead>
<tr>
<th>OSHA Health Hazard Classification</th>
<th>OSHA Physical Hazard Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritant</td>
<td>X Sensitizer</td>
</tr>
<tr>
<td>Toxic</td>
<td>Highly Toxic</td>
</tr>
<tr>
<td>Corrosive</td>
<td>Carcinogenic</td>
</tr>
<tr>
<td>Combustible</td>
<td></td>
</tr>
<tr>
<td>Flammable</td>
<td>X Explosive</td>
</tr>
<tr>
<td>Compressed Gas</td>
<td>Oxidizer</td>
</tr>
<tr>
<td>Water-reactive</td>
<td></td>
</tr>
<tr>
<td>Pyrophoric</td>
<td></td>
</tr>
<tr>
<td>Oxidizer</td>
<td></td>
</tr>
<tr>
<td>Unstable</td>
<td></td>
</tr>
<tr>
<td>Organic Peroxide</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

Inhalation  Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately.

Eye Contact  Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. Do not use eye ointment. Seek medical attention immediately.

Skin Contact  Remove contaminated shoes and clothing. Flush affected area with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.

Ingestion  Do not induce vomiting. If spontaneous vomiting is about to occur, place victim’s head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.

Notes to Physician  INHALATION: Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Administer supplemental oxygen with assisted ventilation, as required.

This material (or a component) sensitizes the heart to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. Administration of sympathomimetic drugs should be avoided.

INGESTION: If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.
SECTION 5. FIRE FIGHTING MEASURES

NFPA Flammability Classification
NFPA Class-IC flammable liquid.

Flash Point
Closed cup: 32°C (90°F). (Tagliabue.)

Lower Flammable Limit
AP 0.8 %

Upper Flammable Limit
AP 7 %

Autoignition Temperature
Not available.

Hazardous Combustion Products
Carbon dioxide, carbon monoxide, smoke, fumes, and/or unburned hydrocarbons.

Special Properties
Flammable Liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire.

Extinguishing Media
SMALL FIRE: Use dry chemicals, carbon dioxide, foam, water fog, or inert gas (nitrogen).
LARGE FIRE: Use foam, water fog, or water spray. Water fog and spray are effective in cooling containers and adjacent structures. However, water can cause frothing and/or may not extinguish the fire. Water can be used to cool the external walls of vessels to prevent excessive pressure, autoignition or explosion. DO NOT use a solid stream of water directly on the fire as the water may spread the fire to a larger area.

Protection of Fire Fighters
Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities if liquid enter sewers or waterways.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Flammable Liquid! Release causes an immediate fire or explosion hazard. Evacuate all non-essential personnel from immediate area and establish a "regulated zone" with site control and security. A vapor-suppressing foam may be used to reduce vapors. Eliminate all ignition sources. All equipment used when handling this material must be grounded. Stop the leak if it can done without risk. Do not touch or walk through spilled material. Remove spillage immediately from hard, smooth walking areas. Prevent spilled material from entering waterways, sewers, basements, or confined areas. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to appropriate waste containers. Use clean, non-sparking tools to collect absorbed material.

For large spills, secure the area and control access. Prevent spilled material from entering sewers, storm drains, other drainage systems, and natural waterways. Dike far ahead of a liquid spill to ensure complete collection. Water mist or spray may be used to reduce or disperse vapors; but, it may not prevent ignition in closed spaces. This material will float on...
Solvent Blend 19216

water and its run-off may create an explosion or fire hazard. Verify that responders are properly HAZWOPER-trained and wearing appropriate respiratory equipment and fire-resistant protective clothing during cleanup operations. In an urban area, cleanup spill as soon as possible; in natural environments, cleanup on advice from specialists. Pick up free liquid for recycle and/or disposal if it can be accomplished safely with explosion-proof equipment. Collect any excess material with absorbent pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal. Comply with all laws and regulations.

SECTION 7. HANDLING AND STORAGE

Handling

A spill or leak can cause an immediate fire or explosion hazard. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Do not contact with oxidizable materials. Do not breathe vapor. Use only with adequate ventilation and personal protection. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Prevent contact with food and tobacco products. Do not take internally.

When performing repairs and maintenance on contaminated equipment, keep unnecessary persons away from the area. Eliminate all potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Provide ventilation to maintain exposure potential below applicable exposure limits. Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

Empty containers may contain material residues which can ignite with explosive force. Misuse of empty containers can be dangerous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers can cause fire, explosion, or release of toxic fumes from residues. Do not pressurize or expose empty containers to open flame, sparks, or heat. Keep container closed and drum bungs in place. All label warnings and precautions must be observed. Return empty drums to a qualified reconditioner. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling, or disposing of empty containers and/or waste residues of this material.

Storage

Store and transport in accordance with all applicable laws. Keep containers tightly closed and store in a cool, dry, well-ventilated place, plainly labeled, and out of closed vehicles. Keep away from all ignition sources. Ground all equipment containing this material. Containers should be able to withstand pressures expected from warming and cooling in storage. This flammable liquid should be stored in a separate safety cabinet or room. A refrigerated room is preferable for materials with a flash point temperature lower than 70°F (21°C). All electrical equipment in areas where this material is stored or handled should be installed in accordance with applicable regulatory requirements and the National Electrical Code.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. All electrical equipment should comply with the National Electric Code. An emergency eye wash station and safety shower should be located near the work-station.

Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.
Solvent Blend 19216

Eye Protection
Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. Suitable eye wash water should be readily available.

Hand Protection
Avoid skin contact. Use gloves (e.g., disposable PVC, neoprene, nitrile, vinyl, or PVC/NBR). Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.

Body Protection
Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex®) while working with flammable and combustible liquids. Additional chemical-resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, boots and additional facial protection. If product comes in contact with clothing, immediately remove soaked clothing and shower. Promptly remove and discarded contaminated leather goods.

Respiratory Protection
For unknown vapor concentrations use a positive-pressure, pressure-demand, self-contained breathing apparatus (SCBA). For known vapor concentrations above the occupational exposure guidelines (see below), use a NIOSH-approved organic vapor respirator if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

General Comments
Warning! Use of this material in spaces without adequate ventilation may result in generation of hazardous levels of combustion products and/or inadequate oxygen levels for breathing. Odor is an inadequate warning for hazardous conditions.

Occupational Exposure Guidelines

<table>
<thead>
<tr>
<th>Substance</th>
<th>Applicable Workplace Exposure Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum hydrocarbon distillates</td>
<td>ACGIH TLV (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm  8 hour(s).</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL Z2 (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 500 ppm  8 hour(s).</td>
</tr>
<tr>
<td>Xylene, all isomers</td>
<td>ACGIH (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm  8 hour(s).</td>
</tr>
<tr>
<td></td>
<td>STEL: 150 ppm  15 minute(s).</td>
</tr>
<tr>
<td></td>
<td>OSHA (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm  8 hour(s).</td>
</tr>
<tr>
<td>Trimethylbenzenes, all isomers</td>
<td>ACGIH (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 25 ppm  8 hour(s).</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>ACGIH (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm  8 hour(s).</td>
</tr>
<tr>
<td></td>
<td>STEL: 125 ppm  15 minute(s).</td>
</tr>
<tr>
<td></td>
<td>OSHA (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm  8 hour(s).</td>
</tr>
<tr>
<td>Nonane, all isomers</td>
<td>ACGIH (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 200 ppm  8 hour(s).</td>
</tr>
<tr>
<td>Toluene</td>
<td>ACGIH (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 50 ppm  8 hour(s).</td>
</tr>
<tr>
<td></td>
<td>OSHA (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 200 ppm  8 hour(s).</td>
</tr>
<tr>
<td></td>
<td>CEIL: 300 ppm</td>
</tr>
<tr>
<td></td>
<td>PEAK: 500 ppm</td>
</tr>
</tbody>
</table>
Solvent Blend 19216

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
<th>Odor</th>
<th>Specific Gravity</th>
<th>pH</th>
<th>Volatility</th>
<th>Vapor Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid.</td>
<td>Transparent, colorless.</td>
<td>Sweet, pungent aromatic hydrocarbon.</td>
<td>0.84 (Water = 1)</td>
<td>Not Applicable.</td>
<td>&gt;1 (Air = 1)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boiling Range</th>
<th>Melting/Freezing Point</th>
<th>Solubility in Water</th>
<th>Viscosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>142° C - 189° C (288° F - 372° F)</td>
<td>Not available.</td>
<td>Very slightly soluble in cold water. (&lt;0.1 % w/w)</td>
<td>not available</td>
</tr>
</tbody>
</table>

Vapor Pressure: 0.5 kPa (4 mm Hg) (at 20°C)

Additional Properties:
Paraffin, Isoparaffin and Cycloparaffin Hydrocarbons Content = AP 23 Wt.% (ASTM D-1319);
Aromatic Hydrocarbon Content = AP 77 Wt. % (ASTM D-1319);
Average Density at 60°F = AP 7.00 lbs./gal. (Calculated via ASTM D-287);
Kauri-Butanol (KB) Value = 71.4 (ASTM D-1133);
Boiling Point Range = 288° to 372°F (142° to 189° C) (ASTM D-86, D-850 or D-1078);
Dry Point Temperature = 372°F (189°C) (ASTM D-86, D-850 or D-1078);
Flash Point = 90° F (32° C) (TCC)

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Not expected to occur.

Conditions to Avoid: Keep away from heat, flame and other potential ignition sources. Keep away from strong oxidizing conditions and agents.

Materials Incompatibility: Strong acids, alkalies, and oxidizers such as liquid chlorine, hydrogen peroxide, and oxygen.

Hazardous Decomposition Products: No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.

SECTION 11. TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 3 of this MSDS.

Toxicity Data:

**C9 Aromatic Hydrocarbons:**
Embryotoxicity was reported in studies of laboratory animals. Adverse effects included increased implantation losses, reduced fetal weights, delayed ossification and an increased incidence of cleft palate.

**Xylene, all isomers:**
Effects from Acute Exposure:
- ORAL (LD₅₀), Acute: 4,300 mg/kg [Rat].
- INHALATION (LC₅₀), Acute: 4,550 ppm for four hours [Rat].
- DERMAL (LD₅₀), Acute: 14,100 mL/kg [Rabbit].

Overexposure to xylene may cause upper respiratory tract irritation, headache, cyanosis, blood serum changes, CNS damage and narcosis. Effects may be increased by the use of alcoholic beverages. Evidence of liver and kidney impairment were reported in workers recovering from a gross over-exposure.
Solvent Blend 19216

Effects from Prolonged or Repeated Exposure:
Impaired neurological function was reported in workers exposed to solvents including xylene. Studies in laboratory animals have shown evidence of impaired hearing following high levels of exposure. Studies in laboratory animals suggest some changes in reproductive organs following high levels of exposure but no significant effects on reproduction were observed. Studies in laboratory animals indicate skeletal and visceral malformations, developmental delays, and increased fetal resorptions following extremely high levels of maternal exposure. Adverse effects on the liver, kidney, bone marrow (changes in blood cell parameters) were observed in laboratory animals following high levels of exposure. The relevance of these observations to humans is not clear at this time.

Trimethylbenzenes, all isomers:
The TCLo for humans is 10 ppm, with somnolence and respiratory tract irritation noted. In inhalation studies with rats, four of ten animals died after exposures of 2400 ppm for 24 hours. An oral dose of 5 mL/kg resulted in death in one of ten rats. Minimum lethal intraperitoneal doses were 1.5 to 2.0 mL/kg in rats and 1.13 to 12 mL/kg in guinea pigs. Levels of total hydrocarbon vapors present in the breathing atmosphere of these workers ranged from 10 to 60 ppm. Mesitylene (1, 3, 5 Trimethylbenzene) inhalation at concentrations of 1.5, 3.0, and 6.0 mg/L for six hours was associated with dose-related changes in white blood cell counts in rats. No significant effects on the complete blood count were noted with six hours per day exposure for five weeks, but elevations of alkaline phosphatase and SGOT were observed. Central nervous system depression and ataxia were noted in rats exposed to 5,100 to 9,180 ppm for two hours.

Ethylbenzene:
Effects from Acute Exposure:
ORAL (LD50), Acute: 3,500 mg/kg [Rat].
DERMAL (LD50), Acute: 17,800 uL/kg [Rabbit].
INTRAPERITONEAL (LD50), Acute: 2.624 mg/kg [Rat].

Effects from Prolonged or Repeated Exposure:
Findings from a 2-year inhalation study in rodents conducted by NTP were as follows: Effects were observed only at the highest exposure level (750 ppm). At this level the incidence of renal tumors was elevated in male rats (tubular carcinomas) and female rats (tubular adenomas). Also, the incidence of tumors was elevated in male mice (alveolar and bronchiolar carcinomas) and female mice (hepatocellular carcinomas). IARC has classified ethyl benzene as “possibly carcinogenic to humans” (Group 2B). Studies in laboratory animals indicate some evidence of post-implantation deaths following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate limited evidence of renal malformations, resorptions, and developmental delays following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate some evidence of adverse effects on the liver, kidney, thyroid, and pituitary gland.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
Aquatic toxicity values for fish, Daphnia and algae are expected to be in the range of 1 - 100 mg/l based upon data from components and similar products. This material may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment. The log Kow value for this product is expected to be in the range of 3.3 to 6.

Environmental Fate
This mixture will normally float on water with its lighter components evaporating rapidly. In stagnant or slow-flowing waterways, a hydrocarbon layer can cover a large surface area. As a result, this covering layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway might be enough to cause a fish kill or create an anaerobic environment. This coating action can also be harmful or fatal to plankton, algae, aquatic life, and water birds. This product is not expected to bioaccumulate through food chains in the environment.
SECTION 13. DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

Maximize material recovery for reuse or recycling. Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitibility (D001) and/or its toxic (D018) characteristics. Conditions of use may cause this material to become a “hazardous waste”, as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact the RCRA/Superfund Hotline at (800) 424-9346 or your regional US EPA office for guidance concerning case specific disposal issues.

SECTION 14. TRANSPORT INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

US DOT Status A U.S. Department of Transportation (DOT) regulated material.
Proper Shipping Name Petroleum Distillates, n.o.s. (Naphtha Solvent), 3, UN1268 PG III
Hazard Class 3
Packing Group(s) III
UN/NA Number UN 1268
Reportable Quantity RQ 250 lbs. [Based upon maximum Xylene concentration of 40% and an RQ of 100 lbs.]
Placard(s) 3
Emergency Response Guide No. 128
HAZMAT STCC No. 4910256
MARPOL III Status Not a DOT "Marine Pollutant" per 49 CFR 171.8.

SECTION 15. REGULATORY INFORMATION

TSCA Inventory This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.
SARA 302/304 Emergency Planning and Notification The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.
SARA 311/312 Hazard Identification The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:
- fire, Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard
This product contains the following components in concentrations above de minimis levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA:

- Xylene, all isomers [CAS No.: 1330-20-7] Concentration: 20 - 40%
- Ethylbenzene [CAS No.: 100-41-4] Concentration: 1 - 15%
- 1, 2, 4 Trimethylbenzene [CAS No.: 95-63-6] Concentration: 1 - 10%

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQs) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are:

- Xylene, all isomers [CAS No.: 1330-20-7] RQ = 100 lbs. (45.36 kg) Concentration: 20 - 40%
- Ethylbenzene [CAS No.: 100-41-4] RQ = 1000 lbs. (453.6 kg) Concentration: 1 - 15%
- Benzene [CAS No.: 71-43-2] RQ = 10 lbs. (4.536 kg) Concentration: <0.05%

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

- Ethylbenzene: 1 - 15%
- Toluene: <1%
- Benzene: <0.05%
- Naphthalene: <0.1%

For New Jersey R-T-K labeling requirements, refer to components listed in Section 2.

Federal Hazardous Substances Act, related statutes, and Consumer Product Safety Commission regulations, as defined by 16 CFR 1500.14(b)(3) and 1500.83(a)(13): This product contains Xylene which may require special labeling if distributed in a manner intended or packaged in a form suitable for use in the household or by children. Precautionary label dialogue should display the following: DANGER: Contains Xylene! Harmful or fatal if swallowed! Call Physician Immediately. Vapor Harmful! KEEP OUT OF REACH OF CHILDREN!

SECTION 16. OTHER INFORMATION

Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

REVISION INFORMATION
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2.2
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ABBREVIATIONS
AP: Approximately      EQ: Equal      >: Greater Than      <: Less Than      NA: Not Applicable      ND: No Data      NE: Not Established
ACGIH: American Conference of Governmental Industrial Hygienists      AIHA: American Industrial Hygiene Association
IARC: International Agency for Research on Cancer      NTP: National Toxicology Program
NIOSH: National Institute of Occupational Safety and Health      OSHA: Occupational Safety and Health Administration
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