



CITGO Petroleum Corporation
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Regular Mineral Spirits (RMS)

(PAINTERS TIME SAVER PAINT THINNER)
Material Safety Data Sheet

MSDS No. 19015
Revision Date 07/08/1999

IMPORTANT: Read this MSDS before handling or disposing of this product and pass this information on to employees, customers and users of this product.

Emergency Overview

Physical State Liquid.
Color Transparent colorless. Odor Light hydrocarbon.

WARNING! Combustible liquid; vapor may cause flash fire!
Mist or vapor may irritate the eyes, mucous membranes, and respiratory tract!

Liquid contact may cause mild to moderate eye and/or moderate to severe skin irritation and inflammation!

May be harmful if inhaled or absorbed through the skin!

Overexposures may cause central nervous system (CNS) depression and/or other target organ effects!

May be harmful or fatal if ingested!

Aspiration into the lungs can cause pulmonary edema and chemical pneumonia!

Based upon animal testing, may adversely affect reproduction!

Spills may create a slipping hazard!

Hazard Rankings

	HMIS	NFPA
Health Hazard	2	1
Fire Hazard	2	2
Reactivity	0	0

* = Chronic Health Hazard

Protective Equipment

Minimum Requirements
See Section 8 for Details



SECTION 1: IDENTIFICATION

Trade Name Regular Mineral Spirits (RMS)

Technical Contact

(800) 987-7601
(8am - 4pm CT M-F)

Product Number 2015

Medical Emergency

(918) 496-4700

CAS Number

Mixture - See Section 2.

CHEMTREC Emergency

(800) 424-9300

Product Family

Blended Petroleum Hydrocarbon Solvent

Synonyms

RMS (2015): Solvent 2015; Mineral Spirits 2015; RMS-2015;
Mineral Spirits; Type 1B Mineral Spirits (meets ASTM D-235 Type 1B specifications);
Stoddard Solvent; Type 1 Hydrocarbon Drycleaning Solvent (meets ASTM D-484 Type 1 specifications);
White Spirits (meets Dry Cleaning Fluid Specification PD680 Type 1); C9-C12 Petroleum Hydrocarbons.

SECTION 2: COMPOSITION

Component Name(s)

- 1) Stoddard Solvent
- 2) Heavy Hydrodesulfurized Naphtha (Petroleum)
- 3) Heavy Hydrotreated Naphtha (Petroleum)
- 4) Nonanes
- 5) n-Propylbenzene
- 6) Trimethylbenzenes
- 7) 1,2,4-Trimethylbenzene (Pseudocumene)
- 8) Ethylmethylbenzenes (Ethyltoluenes)
- 9) C10 Alkanes, Isoparaffins, and Cycloalkanes
- 10) C11 Alkanes, Isoparaffins, and Cycloalkanes
- 11) C12 Alkanes, Isoparaffins, and Cycloalkanes

CAS Registry No.

8052-41-3
64742-82-1
64742-48-9
Mixture
103-65-1
25551-13-7
95-63-6
25550-14-5
Mixture
Mixture
Mixture

Concentration (%)

100
45-55
45-55
14-19
0.5-1.5
3-5
1-4
4-7
34-47
12-16
2-4

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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, Eye Contact, Absorption, Inhalation

Signs and Symptoms of Acute Exposure

Inhalation

Breathing high concentrations of vapor may cause respiratory irritation, euphoria, excitation or giddiness, headache, nausea, vomiting, abdominal pain, loss of appetite, fatigue, muscular weakness, staggering gait, and central nervous system (CNS) depression. CNS effects include dizziness, drowsiness, disorientation, vertigo, memory loss, visual disturbances, difficulty with breathing, convulsions, unconsciousness, paralysis, coma, and even death, depending upon the level of exposure concentration and/or duration. Vapors can reduce the oxygen content in air. Approximately 20,000 ppm (or 2 vol.%) in air is fatal to humans in 5 to 10 minutes. Sudden death from cardiac arrest (heart attack) may result from exposure to 5,000 ppm for only 5 minutes. Oxygen deprivation is possible if working in confined spaces.

Eye Contact

Animal test results on similar materials suggest that this product can cause minimal to moderate eye irritation upon short-term exposure. Symptoms include stinging, watering, redness, and swelling.

Skin Contact

Animal test results on similar materials suggest that this product can cause moderate skin irritation. Short-term contact symptoms include redness, itching, and burning of the skin. This material may also be absorbed through the skin and produce CNS depression effects (see "Inhalation" above). If the skin is damaged, absorption increases. Prolonged and/or repeated contact may cause moderate to severe dermatitis. Chronic symptoms may include drying, swelling, scaling, blistering, cracking, and severe tissue damage.

Ingestion

If swallowed, this material may irritate the mucous membranes of the mouth, throat, and esophagus. It can be readily absorbed by the stomach and intestinal tract. Symptoms include a burning sensation of the mouth and esophagus, nausea, vomiting, dizziness, staggering gait, drowsiness, loss of consciousness, and delirium, as well as additional central nervous system (CNS) effects (see "Inhalation" above).

Due to its light viscosity, there is a danger of aspiration into the lungs during vomiting. Aspiration can result in severe lung damage or death. Progressive CNS depression, respiratory insufficiency, and ventricular fibrillation may also result in death.

Chronic Health Effects Summary

Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung tumor) 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.

Based upon animal testing, the CS aromatic hydrocarbon components (trimethylbenzenes and ethylmethylbenzenes) are presumed to cause fetal toxicity and/or decreased fetal and newborn weights if overexposure occurs during a woman's early gestation period (see Section 11).

Conditions Aggravated by Exposure

Personnel with pre-existing central nervous system (CNS) disease, neurological conditions, skin or blood disorders, chronic respiratory diseases, or impaired liver or kidney function, and women attempting to conceive should avoid exposure.

Target Organs

This substance is toxic to lungs, central nervous system, brain, mucous membranes, skin, eyes, and possibly, the blood, liver, kidneys, and reproductive system.

Carcinogenic Potential

This product does not contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC, or NTP.

OSHA Health Hazard Classification				OSHA Physical Hazard Classification			
Irritant	<input checked="" type="checkbox"/>	Toxic	<input type="checkbox"/>	Combustible	<input checked="" type="checkbox"/>	Explosive	<input type="checkbox"/>
Sensitizer	<input type="checkbox"/>	Highly Toxic	<input type="checkbox"/>	Flammable	<input type="checkbox"/>	Oxidizer	<input type="checkbox"/>
Corrosive	<input type="checkbox"/>	Carcinogenic	<input type="checkbox"/>	Compressed Gas	<input type="checkbox"/>	Organic Peroxide	<input type="checkbox"/>
						Pyrophoric	<input type="checkbox"/>
						Water-reactive	<input type="checkbox"/>
						Unstable	<input type="checkbox"/>

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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 or give anything by mouth. 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 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. Vigorous anti-inflammatory/steroid treatment may be required at first evidence of upper airway or pulmonary edema. Administer 100 percent humidified supplemental oxygen with assisted ventilation, as required. If ingested, this material presents a significant aspiration/chemical pneumonitis hazard. As a result, induction of emesis is not recommended. Administer an aqueous slurry of activated charcoal followed by a cathartic such as magnesium citrate or sorbitol. Also, treatment may involve careful gastric lavage if performed soon after ingestion or in patients who are comatose or at risk of convulsing. Protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position. Obtain chest X-ray and liver function tests. Monitor for cardiac function, respiratory distress and arterial blood gases in severe exposure cases.

SECTION 5: FIRE FIGHTING MEASURES

NFPA Flammability Classification	OSHA/NFPA Class-II Combustible Liquid. Highly combustible
Flash Point/Method	CLOSED CUP: 41° to 43°C (105° to 110°F). (Tagliabue (ASTM D-56))
Lower Flammable Limit	AP 0.5 % Upper Flammable Limit AP 6.0 %
Auto-Ignition Temp.	AP 230°C (446°F)
Hazardous Combustion Products	Burning or excessive heating may produce smoke, carbon monoxide, carbon dioxide, and possibly other harmful gases/vapors.
Special Properties	Combustible Liquid: This material releases vapors at or approaching its flash point temperature. 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. May create vapor/air 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 (CO ₂), foam, water fog, or inert gas (nitrogen). LARGE FIRE: Use foam, water fog, or waterspray. Water fog and spray are effective in cooling containers and adjacent structures but might cause frothing and/or may not achieve extinguishment. A water jet may be used to cool the vessel's external walls to prevent pressure build-up, autoignition, or explosion. NEVER use a water jet directly on the fire because it may spread the fire to a larger area.

Regular Mineral Spirits (RMS)**Fire Fighting Protective Clothing**

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 venting safety devices or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities if liquid(s) enter sewers or waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

Combustible 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 be done without risk. Do not touch or walk through spilled material. Remove spillage immediately from hard, smooth walking areas. Prevent its entry into 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. 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 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/explosion hazard. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Bond and ground all equipment before transferring this material from one container to another. Do not contact with oxidizable materials. Do not breathe vapor. Use only with adequate ventilation/personal protection. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Prevent contact with food, chewing, or smoking materials. 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.

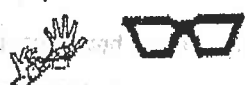
Empty containers may contain material residues which can ignite with explosive force. Misuse of empty containers can be dangerous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers can cause fire, explosion, or release of toxic fumes from residues. Do not 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 combustible liquid should be stored in a separate safety cabinet or room. All electrical equipment in areas where this material is stored or handled should be installed in accordance with applicable requirements of the N.F.P.A.'s National Electrical Code (NEC).

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SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and/or mists below the pertinent exposure limits (see below). All electrical equipment should comply with the NFPA NEC Standards. Ensure that an emergency eye wash station and safety shower are near the work-station location.
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.
	
Eye Protection	Safety glasses with side shields are recommended as a minimum protection. During transfer operations or when there is a likelihood of misting, splashing, or spraying, chemical goggles and face shield should be worn. Suitable eye wash water should be readily available.
Hand Protection	Avoid skin contact and use gloves (disposable PVC, neoprene, nitrile, vinyl, or PVC/NBR). Before eating, drinking, smoking, use of toilet facilities, or leaving work, wash hands with plenty of mild soap and water. DO NOT use gasoline, kerosene, other solvents, or harsh abrasive skin cleaners.
Body Protection	Avoid skin contact. It is recommended that fire-retardant garments (e.g. Nomex™) be worn while working with flammable and combustible liquids. If splashing or spraying is expected, chemical-resistant protective clothing (Tyvek®, nitrile, or neoprene) should be worn. This might include long-sleeves, apron, slicker suit, boots, and additional facial protection. If general contact occurs, IMMEDIATELY remove soaked clothing and take a shower. Contaminated leather goods should be removed promptly and discarded.
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. Respirator use should follow OSHA requirements (29 CFR 1910.134) or equivalent standard (e.g. ANSI Z88.2).
General Comments	Warning! Odor is an inadequate warning for hazardous conditions. This product is sometimes used as a dry-cleaning solvent. Retained solvent present in absorbent clothing (e.g., shoulder pads, leather belts or straps, etc.) which remains in contact with the skin for prolonged periods has caused severe skin irritation including redness, swelling, burns, and severe tissue damage. Care must be taken to ensure that garments are completely dry before being worn.

Occupational Exposure Guidelines

Substance

1) Stoddard Solvent

2) Nonane, all isomers

3) Trimethylbenzene (mixed isomers)

Applicable Workplace Exposure Levels

TWA: 100 (ppm) from ACGIH (TLV) [1999]
 TWA: 500 (ppm) from OSHA (PEL) [1989]
 TWA: 200 (ppm) from ACGIH (TLV) [1999]
 TWA: 200 (ppm) from OSHA (PEL) [1989]
 TWA: 25 (ppm) from ACGIH (TLV) [1999]
 TWA: 25 (ppm) from OSHA (PEL) [1989]

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid.	Color	Transparent, colorless.	Odor	Light hydrocarbon.
Specific Gravity	0.78-0.79 (Water = 1)	pH	Not applicable.	Vapor Density	4.7 (Air = 1)
Boiling Point/Range	149° to 204°C (300° to 400°F) (ASTM D-2887)			Melting/Freezing Point	-85° to -25°C (-85° to -13°F)
Vapor Pressure	2.1 mm Hg at 20°C (68°F).			Viscosity (cSt @ 40°C)	LT 20
Solubility in Water	Slightly soluble in cold water (LT 0.01%).			Volatile Characteristics	Volatile Organic Compounds (VOCs) Content = 100%; 784 gm/L

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Additional Properties Alkane, Isoparaffin, and Cycloalkane Hydrocarbons Content = 85 to 92 Wt.% (ASTM D-1319);
 C8-C11 Aromatic Hydrocarbon Content = 8 to 16 Wt.% (ASTM D-1319);
 Average Density at 60°F = 6.53 lbs./gal. (ASTM D-2161);
 Aniline Cloud Point Temperature = 130°F (54°C) (ASTM D-811);
 Kauri-Butanol (KB) Value = 40 to 46 (ASTM D-1133);
 Dry Point Temperature = 383°F (195°C) (ASTM D-86);
 Evaporation Rate = 0.18 when n-Butyl acetate = 1.0;
 Heat Value = 19,668 Btu.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability Stable. Hazardous Polymerization Not expected to occur.
 Conditions to Avoid Keep away from extreme heat, strong acids, and strong oxidizing conditions.
 Materials Incompatibility Strong acids, alkalis, and oxidizers such as liquid chlorine, hydrogen peroxide, and oxygen.
 Hazardous Decomposition Products No substances are readily identified from composition; but, no degradation data is available.

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

Stoddard Solvent or Mineral Spirits:

ORAL (LD50): Acute: GT 24,600 mg/kg [Rat].
 GAS (LC50): Acute: GT 21,400 mg/m³ for 4 hours [Rat].
 DERMAL (LD50): Acute: 15,400 mg/kg [Rabbit].

n-Nonane:

GAS (LC50): Acute: 3,200 ppm for 4 hours [Rat].
 INTRAVENOUS (LD50): Acute: 218 mg/kg [Mouse].

n-Propylbenzene:

ORAL (LD50): Acute: 6,040 mg/kg [Rat].
 GAS (LC50): Acute: 65,000 ppm for 2 hours [Rat].

Trimethylbenzenes:

ORAL (LD50): Acute: 8,970 mg/kg [Rat].

1,2,4-Trimethylbenzene:

ORAL (LD50): Acute: 5,000 mg/kg [Rat].
 GAS (LC50): Acute: 18,000 mg/m³ for 4 hours [Rat].

Ethylmethylbenzenes (Ethyltoluenes):

GAS (LC50): Acute: 60,000 mg/m³ for 2 hours [Cat].
 GAS (LC50): Acute: 54,000 mg/m³ for 4 hours [Mouse].

Stoddard Solvent or Mineral Spirits is a mild to moderate eye irritant and a skin and respiratory tract irritant. Human volunteers exposed to an airborne concentration of 400 ppm experienced no ill effects. Saturated vapors in air (or AP 8,200 mg/m³) are below the LC50 level in rats.

Based upon laboratory animal studies, repeated direct application of Stoddard Solvent to the skin can produce defatting dermatitis, kidney damage, and changes in blood-forming capacity. Rats developed kidney damage and elevated blood urea nitrogen levels when exposed to a concentration of 1.9 mg/L for 85 days. The kidney damage in rats appeared to involve both the tubules and glomeruli, but only occurred in males; so these effects may not be pertinent to humans. Male rats exposed to airborne concentrations of 100, 150, and 1,500 ppm for 6 hours per day, 5 days per week for 90 days did not develop any functional or histological signs of neurotoxicity. Stoddard Solvent and Mineral Spirits were not mutagenic in the Salmonella/microsome (Ames) assay, the in-vivo mouse bone marrow cell chromosome aberrations assay, and the in-vitro rat sister chromatid exchanges assay.

Rats inhaling n-nonane at an airborne concentration of 1,500 ppm for 7 days displayed mild tremors and loss of coordination. Inhalation of 1,600 ppm for 8 hours per day for 90 days showed animal weight loss or decreased weight gain and changes in the structure of their salivary glands. And, liver damage and an altered response to drugs were seen in rats given n-nonane for 2 to 7 days.

Trimethylbenzenes are primary skin irritants and may cause asthmatic bronchitis and/or anemia. Based upon animal reproductive/developmental studies, trimethylbenzenes may also cause fetal toxicity.

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Ethylmethylbenzenes are primary skin irritants and overexposures might cause liver and/or kidney damage or increase blood cholinesterase levels. Inhalation of these and other C9 aromatic hydrocarbons by pregnant mice and rats during gestational days 6 through 15 resulted in decreased fetal and newborn weights.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Ecological effects testing has not been conducted on this material. If spilled, this naphtha, its storage tank water bottoms and sludge, and any contaminated soil or water may be hazardous to human, animal, and aquatic life. Volatile aromatic hydrocarbon components (n-propylbenzene and trimethylbenzenes) of this product may be released and possibly contribute to the creation of atmospheric smog.

Using Rainbow Trout (*Oncorhynchus mykiss*) and Dungeness Crab (*Cancer magister*), similar naphthas showed a 96-hour TLM (Median Toxic Limit) from 5 ppm to 20 ppm in ambient saltwater. Also, 24-hour and 96-hour TLms produced results from 60 ppm to 200 ppm when using Bluegill Sunfish (*Lepomis macrochirus*), Goldfish (*Carassius auratus*), Guppy (*Lebistes reticulatus*) and Juvenile American Shad (*Squalius cephalus*) in fresh water. Based upon actual spill incident investigations, similar naphthas have been shown to bioaccumulate in tissues of various fish from a 1 ppm to 10 ppm levels.

Environmental Fate

This naphtha mixture is potentially toxic to freshwater and saltwater ecosystems. It will normally float on water with its lighter components evaporating rapidly. In stagnant or slow-flowing waterways, a naphtha 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. Additionally, potable water and boiler feed water systems should NEVER be allowed more than 5 ppm contamination from this material.

For additional ecological information concerning components of this product, users should refer to the Hazardous Substances Data Bank® and the Oil and Hazardous Materials/Technical Assistance Data System (OHM/TADS) maintained by the U.S. National Library of Medicine. (See Section 2 for components.)

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. If spilled material is introduced into a wastewater treatment system, chemical and biological oxygen demand (COD and BOD) will likely increase. This material is biodegradable if gradually exposed to microorganisms, preferably in an aerobic environment. In sewage-seeded wastewater, at or below concentrations of 0.2 vol.% of this naphtha, there is little or no effect on bio-oxidation and/or digestion. However, at 1 vol.%, it doubles the required digestion period. Higher concentrations interfere with floc formation and sludge settling and also plug filters or exchange beds. Vapor emissions from a bio-oxidation process contaminated by this material might prove to be a potential health hazard.

Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitibility (D001) characteristics. In addition, 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 Parts 260 through 271). State and/or local regulations might be even 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

DOT Status

This material is regulated by the U.S. Department of Transportation (DOT).

Regular Mineral Spirits (RMS)

Proper Shipping Name Petroleum distillates, n.o.s. (Naphtha Solvent) or (Nonanes, Ethylmethylbenzenes)

This product has a flash point temperature of between 100° and 141°F (38° to 60°C). For bulk shipments, it is classified as a DOT "Flammable Liquid". However, according to 49 CFR 173.120(b)(2) and 173.150(f)(1), this product may be reclassified as a "Combustible Liquid" and exempted from certain transportation-related requirements, such as labeling, when shipped in non-bulk "limited-quantity" containers of less than 119 gallons capacity. According to 49 CFR 173.150(f)(2) and (3), this provision does not apply to "limited-quantities" offered for or transported via vessel or aircraft or products which are defined as DOT "Marine Pollutants". It is recommended that "Flammable Liquid" products which are reclassified be so identified on the bill-of-lading as "Combustible liquid, n.o.s. (Solvent Naphtha) or (Petroleum Distillates) or (Nonanes, Ethylmethylbenzenes) with identification number "NA1983".

Hazard Class

Class 3: Flammable liquid.

Packing Group(s)

PG III

UN/NA ID

UN1268

Reportable Quantity

The Reportable Quantity (RQ) substance components in this product which might require DOT HAZMAT bill-of-lading display are Cumene and Xylenes.

Emergency Response Guide No. 128

Placards



HAZMAT STCC No.

49 102 56

MARPOL III Status

Component analysis might define this product as a DOT "Marine Pollutant" per 49 CFR 171.8 (Trimethylbenzenes, Ethylmethylbenzenes).

SECTION 15: REGULATORY INFORMATION

TSCA Inventory

This product and/or its components are listed on the Toxic Substance Control Act (TSCA) inventory.

SARA 302/304

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

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 Hazard, Acute (Immediate) Health Hazard, and Chronic (Delayed) Health Hazard.

SARA 313

This product contains the following component in concentrations at or above de minimis levels and which is listed as toxic chemical in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: 1,2,4-Trimethylbenzene (Pseudocumene) [CAS No. 85-83-8] concentration: 1 to 4%.

CERCLA

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 (RQ's) 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 subject to this statute are:

Xylenes (RQ = 100 lbs. [45.36 kg]) concentration: 0.001 to 0.36%

Ethylbenzene (RQ = 1000 lbs. [453.6 kg]) concentration: 0 to 0.072%

Cumene (RQ = 5000 lbs. [2268 kg]) concentration: 0.43 to 0.72%

CWA

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.

California
Proposition 65

This material is not known to contain any chemical substances which are known to the State of California to cause cancer, birth defects, or other reproductive harm, and therefore, it is not subject to requirements of California Health & Safety Code Section 25249.5.

Regular Mineral Spirits (RMS)

New Jersey
Right-to-Know Label

For New Jersey labeling refer to components listed in Section 2.

Additional Regulatory
Remarks

Under the 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 "Petroleum Distillates" 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: **Contains Petroleum Distillates! May be harmful or fatal if swallowed! Keep Out of Reach of Children!**

Under Section 12(b) of TSCA: Because it contains detectable amounts of n-Propylbenzene [CAS No. 103-65-1], Cumene (Isopropylbenzene) [CAS No. 98-82-8], and other C9 Aromatic Hydrocarbons, this product might be subject to US EPA's one-time only per country export notification requirements.

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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ABBREVIATIONS

AP = Approximately Established	EQ = Equal	GT = Greater Than	LT = Less Than	NA = Not Applicable	ND = No Data	NE = Not
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		
NPCA = National Paint and Coating Manufacturers Association				HMIS = Hazardous Materials Information System		
NFPA = National Fire Protection Association				EPA = Environmental Protection Agency		

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