

**Safety Data Sheet**  
**Mineral Spirits R66**

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

**1.1 Product identifier**

**Product name:** Mineral Spirits R66

**Synonym(s):** Solvent naphtha (petroleum), medium aliphatic and/or Stoddard Solvent and/or distillates (petroleum), hydrotreated light and/or C9 - C15 alkanes, cycloalkanes & aromatics blend

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

**General use:** Industrial and laboratory use

**Uses advised against:** None specified

**1.3 Details of the supplier and of the safety data sheet**

**Manufacturer/Distributor**

Silver Fern Chemical, Inc.

2226 Queen Anne Avenue North, Suite C

Seattle, WA 98109 USA 1-866-282-3384

Website - [www.silverfernchemical.com](http://www.silverfernchemical.com); email address - [info@silverfernchemical.com](mailto:info@silverfernchemical.com)

**1.4 Emergency telephone number**

+1-800-535-5053; Outside USA & Canada +1-352-323-3500

**SECTION 2 - HAZARDS IDENTIFICATION**

**2.1 Classification of substance or mixture**

**Product definition:** Mixture

**Classification in accordance with 29 CFR 1910 (OSHA HCS) and Regulation EC No. 1272/2008**

Flammable Liquid - Category 3 [H226]

Aspiration Hazard - Category 1 [H304]

Acute Toxicity, Dermal - Category 5 [H313]

Skin Irritation - Category 2 [H315]

Eye Irritation - Category 2A [H319]

Acute Toxicity, Inhalation - Category 4 [H332]

Single Target Organ Toxicity, Single Exposure - Category 3; STOT SE 3 [H335]

Single Target Organ Toxicity, Single Exposure - Category 3; STOT SE 3 [H336]

Carcinogenicity - Category 2 [H351]

Reproductive Toxicity - Category 2 [H361d]

Single Target Organ Toxicity, Repeated Exposure - Category 1; STOT RE 1 [H372]

Aquatic Toxicity, Chronic - Category 2 [H411]

**2.2 Label elements**

**Hazard symbol(s):**



GHS02



GHS07



GHS08



GHS09

**Signal word:**

Danger

**Hazard statement(s):**

H226 - Flammable liquid and vapor

H304 - May be fatal if swallowed and enters airways

H313 - May be harmful in contact with skin

H315 - Causes skin irritation

H320 - Causes serious eye irritation

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

H351 - Suspected of causing cancer

H361d - Suspected of damaging the unborn child

H372 - Causes damage to the central nervous system through prolonged and repeated exposure

H411 - Toxic to aquatic life with long lasting effects

**Precautionary statements:**

**[Prevention]**

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat, open flames and hot surface. No smoking.

P233 - Keep container tightly closed.

P240 - Ground and bond container and receiving equipment.  
P241 + P242 - Use explosion proof electrical, ventilating and lighting equipment. Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P260 - Do not breathe mist and vapor.  
P264 - Wash hands and other exposed skin areas thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 - Avoid release to the environment  
P280 - Wear protective gloves, protective clothing and eye protection.

**[Response]** P301 + P331 + P310 - IF SWALLOWED: DO NOT induce vomiting. Immediately call a POISON CENTER or doctor.  
P303 + P361 + P353 - IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water or shower.  
P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a comfortable position for breathing. Call a POISON CENTER or doctor if you feel unwell.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
P308 + P313 - If exposed or concerned: Get medical attention.  
P321 + P312 - Specific treatment: Call a POISON CENTER or doctor if you feel unwell. Refer to Section 4 of this SDS.  
P332 + P337 + P313 - If skin irritation occurs or if eye irritation persists: Get medical attention.  
P362 - Take off contaminated clothing and wash before reuse.  
P370 + P378 - In case of fire: Use water fog, foam, dry chemical or carbon dioxide for extinction.  
P391 - Collect spillage.

**[Storage]** P405 + P403 + P233 + P235 - Store locked up in a well-ventilated place. Keep container tightly closed. Keep cool.  
**[Disposal]** P501 - Dispose of contents and containers in accordance with national and local regulations.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS**

Repeated exposure may cause skin dryness or cracking

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Not applicable

**3.2 Mixtures**

% by Weight	Ingredient	CAS Number	EC Number	Index Number	GHS Classification
0 - 100	Solvent naphtha (petroleum), medium aliphatic	64742-88-7	265-191-7	649-405-00-X	H226, H304, H313, H315, 332, H336, H361d, H372, H411
0 - 100	Stoddard Solvent	8052-41-3	232-489-3	649-345-00-4	H226, H304, H336, H351, H411
0 - 100	Distillates (petroleum), hydrotreated light	64742-47-8	265-149-8	649-422-00-2	H226, H304, H315, H332, H336, H411
40 - 97	Blend of C9 - C15 Alkanes, cycloalkanes & aromatics	Proprietary	-----	-----	H226, H304, H320, H336, H351, H373, H411
1 - 5	1,2,4-Trimethylbenzene	95-63-6	202-436-9	601-043-00-3	H226, H315, H319, H332, H335, H411
0.1 - 5	Nonane	111-84-2	203-913-4	-----	H226, H304, H315, H319, H336, H410
0.1 - 5	Xylene	1330-20-7	215-535-7	601-022-00-9	H226, H312, H315, H336
0 - 5	Ethyltoluene	25550-14-5	247-093-6	-----	H226, H304, H315, H319, H335, H336, H411
0.1 - 1.5	Trimethylbenzene	25551-13-7	247-099-9	-----	H226, H302, H304, H312, H315, H319
0.01 - 3	Cumene	98-82-8	202-704-5	601-024-00-X	H226, H304, H335, H411
0.01 - 0.5	Ethylbenzene	100-41-4	202-849-4	601-023-00-4	H225, H304, H332, H411
0.01 - 0.5	Naphthalene	91-20-3	202-049-5	601-052-00-2	H302, H351, H410
0 - 0.2	Toluene	108-88-3	203-625-9	601-021-00-3	H225, H304, H315, H336, 361d, H373

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with the applicable provisions of paragraph (i).

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

## SECTION 4 – FIRST AID MEASURES

---

### 4.1 Description of first aid measures

**Inhalation:** If product mist or vapor causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. If unconscious, maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist or if the victim feels unwell, seek medical attention.

**Eyes:** Immediately flush eyes with large amounts of water or saline solution for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do after first 2 minutes and continue rinsing. If irritation persists seek medical attention, preferably from an ophthalmologist.

**Skin:** Flush skin with large amounts of water while removing contaminated clothing. Wash the affected area with soap and water followed by thorough rinsing. Wash contaminated clothing and shoes before reuse. If irritation persists or if the victim feels unwell, seek medical attention.

**Ingestion:** Rinse mouth with water if the victim is conscious. Remove dentures if present. DO NOT induce vomiting unless directed to do so by medical personnel. Vomiting may occur spontaneously. To prevent aspiration of material into the lungs, lay the victim on one side with the head lower than the waist. Never give anything by mouth to an unconscious or convulsing person. Do not leave the victim unattended. Seek immediate medical attention.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential health symptoms and effects

**Eyes:** Causes serious eye irritation. Symptoms may include inflammation, swelling, tearing, blurred vision and pain. Vapor or mist can cause eye irritation.

**Skin:** Causes skin irritation with localized redness, itching and discomfort. Prolonged contact with unprotected skin may cause defatting of the skin and dermatitis. Prolonged and repeated contact with unprotected skin may result in the absorption of harmful amounts of material.

**Inhalation:** Harmful if inhaled. May cause respiratory tract irritation with headache, cough, chest tightness and shortness of breath. May cause nausea, vomiting, drowsiness, dizziness, blurred vision anesthetic effects, narcosis, lassitude (weakness, exhaustion), cyanosis, apnea and cardiac arrest. May cause central nervous system depression and other central nervous system effects including incoordination, impaired reaction time, performance and speech reductions, encephalopathy, unconsciousness, coma and death. Prolonged and repeated inhalation may cause permanent brain and nervous system damage. Inhalation of vapor and mist may damage the unborn child. Effects may be delayed.

**Ingestion:** Harmful if swallowed. Causes irritation of the digestive tract with nausea, vomiting, abdominal pain and diarrhea. Causes dizziness, drowsiness, weakness, fatigue, headache and unconsciousness. May cause central nervous system depression with effects similar to those of acute inhalation. This material can get into the lungs during swallowing or vomiting causing lung inflammation and chemical pneumonitis, which may be fatal. Symptoms of aspiration into the lungs include coughing, gasping, choking, shortness of breath, bluish colored skin, rapid breathing and rapid heart rate.

**Chronic:** Individuals with pre-existing skin conditions and respiratory disorders may be more susceptible to the effects of this product. Prolonged or repeated skin contact may cause drying and cracking of the skin, dermatitis or aggravate existing skin conditions. Chronic inhalation can damage the central nervous system with symptoms parallel to those of acute inhalation. Impaired central nervous system functions from pre-existing disorders may be aggravated by exposure to this product. May have a deleterious effect on pre-existing respiratory disorders such as asthma and other breathing disorders. Effects may be delayed. This product contains chemicals that may possibly cause cancer in humans. Exposure to this product may damage the unborn child. Refer to Section 11.2.

Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal. Organic solvents may be absorbed into the body by inhalation and cause permanent damage to the nervous system, including the brain. Chronic solvent abuse (e.g. sniffing solvents such as those contained in this product) has been associated with irregular heart rhythms and potential cardiac arrest.

### 4.3 Indication of any immediate medical attention and special treatment needed

#### Advice to doctor and hospital personnel

Administration of adsorbents such as activated charcoal may be of value. Gastric lavage may be effective when performed by a physician within 4 hours of ingestion. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting.

## SECTION 5 – FIRE FIGHTING MEASURES

---

### 5.1 Extinguishing media

**Suitable methods of extinction:** Use extinguishing media such as water spray or fog, carbon dioxide, foam and dry chemical.

**Unsuitable methods of extinction:** Water jets or streams may spread the fire. This material floats on water.

### 5.2 Special hazards arising from the substance or mixture

Flammable liquid and vapor! Vapors are heavier than air and can travel along the ground to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Closed containers may explode due to the buildup of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Obtain medical attention.

**Explosion hazards:** Avoid sources of ignition. Vapors may form an explosive mixture with air, especially in confined spaces. Ground and bond containers in storage and when container is in use.

### 5.3 Advice to firefighters

Firefighters should wear full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against

potential hazardous combustion or decomposition products and oxygen deficiencies. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Be aware that burning liquids may float on water. Firefighters must control runoff to prevent environmental contamination. Notify appropriate authorities of potential fire and explosion hazard if liquid enters sewers or waterways.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel. Wear appropriate protective clothing and equipment designated in Section 8.2. Ventilate the area. Remove all sources of ignition. NO SMOKING. Clean up spills immediately. Spill creates a slip hazard.

### 6.2 Environmental precautions

Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements.

### 6.3 Methods and materials for containment and cleaning up

Approach spill from upwind direction. DO NOT FLUSH SPILL DOWN THE DRAIN. Cover drains and contain spill. Cover spill with a large quantity of inert absorbent. Do not use combustible material such as sawdust. Collect material using non-sparking tools and place into an approved container for proper disposal. Observe possible material restrictions (Sections 7.2 and 10.5). Do not allow material or runoff from rinsing contaminated areas to enter floor drains or storm drains and ditches that lead to waterways. Dispose of via a licensed waste disposal contractor.

If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal in accordance with local regulations.

Petroleum distillates, solvent naphthas and other petroleum products are classified as oil under Section 311 of the Clean Water Act (CWA) and under the Oil Pollution Act (OPA). In the USA discharges or spills of material on waters of the United States, their adjoining shorelines or into conduits leading to surface waters must be reported to the National Response Center at 800-424-8802.

### 6.4 Reference to other sections

For indications about waste treatment, see Section 13.

## SECTION 7 – STORAGE AND HANDLING

### 7.1 Precautions for safe handling

Wear all appropriate personal protective equipment specified in Section 8.2. Do not get in eyes or on skin or clothing. Do not inhale mist or vapor. NO SMOKING. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator. Open containers slowly to control possible pressure release. Wash contaminated clothing and shoes thoroughly before reuse.

#### Advice on protection against fire and explosion

Keep away from heat and sources of ignition. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in dry, cool, well-ventilated areas away from incompatible materials (see Section 10.5), food and drink. Keep away from heat and ignition sources. Transfer only to approved containers having correct labeling. Keep containers tightly closed when not in use. Protect containers against physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Containers are hazardous when empty as they contain product residue. Do not cut, drill, weld, braze, solder grind or perform similar operations on or near empty containers. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Keep out of reach of children.

### 7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

## SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Occupational exposure limit values

CAS Number	Ingredient	OSHA PEL	ACGIH TLV	NIOSH
-----	C9 - C15 Alkanes	-----	200 ppm - 8 h TWA	-----
-----	C9 - C15 Cycloalkanes	-----	400 ppm - 8 h TWA	-----
-----	C9 - C15 Aromatics	-----	400 ppm - 8 h TWA	-----
98-82-8	Cumene	50 ppm; 245 mg/m <sup>3</sup> TWA	50 ppm; 246 mg/m <sup>3</sup> TWA 400 ppm; 984 mg/m <sup>3</sup> STEL; Skin	50 ppm; 245 mg/m <sup>3</sup> TWA; Skin 900 ppm IDLH [10% LEL]
67472-47-8	Distillates (petroleum), hydrotreated light	-----	200 ppm - 8 h TWA	-----
100-41-4	Ethylbenzene	100 ppm, 435 mg/m <sup>3</sup> TWA	20 ppm; 87 mg/m <sup>3</sup> TWA	100 ppm, 435 mg/m <sup>3</sup> TWA 150 ppm, 545 mg/m <sup>3</sup> STEL 800 ppm IDLH
91-20-3	Naphthalene	10 ppm, 50 mg/m <sup>3</sup> TWA	400 ppm; 941 mg/m <sup>3</sup> TWA 10 ppm, 52 mg/m <sup>3</sup> STEL; Skin	10 ppm, 50 mg/m <sup>3</sup> TWA 15 ppm, 75 mg/m <sup>3</sup> STEL 250 ppm IDLH
111-84-2	Nonane	-----	200 ppm; 1,050 mg/m <sup>3</sup> TWA	200 ppm; 1,050 mg/m <sup>3</sup> TWA

67472-88-7	Solvent Naphtha (petroleum), medium aliphatic	100 ppm, 400 mg/m <sup>3</sup> , 4 h TWA	-----	-----
8052-41-3	Stoddard Solvent	500 ppm; 2,900 mg/m <sup>3</sup> TWA	100 ppm; 525 mg/m <sup>3</sup> TWA	350 ppm; 1,800 mg/m <sup>3</sup> ceiling 20,00 ppm IDLH
95-63-6	1,2,4-Trimethylbenzene	-----	25 ppm; 123 mg/m <sup>3</sup> TWA	25 ppm; 125 mg/m <sup>3</sup> TWA
25551-13-7	Trimethylbenzene	-----	25 ppm; 123 mg/m <sup>3</sup> TWA	-----
108-88-3	Toluene	200 ppm TWA	20 ppm TWA	100 ppm; 375 mg/m <sup>3</sup> TWA 150 ppm; 560 mg/m <sup>3</sup> STEL 500 ppm IDLH
1330-20-7	Xylene	100 ppm; 245 mg/m <sup>3</sup> TWA Skin	100 ppm; 435 mg/m <sup>3</sup> TWA	100 ppm; 435 mg/m <sup>3</sup> TWA 150 ppm; 545 mg/m <sup>3</sup> STEL 900 ppm IDLH

A "skin" notation following the inhalation exposure guideline refers to the potential for dermal absorption of the material, including eyes and mucous membranes, either by direct contact with vapors or by direct skin contact. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposure should be considered.

## 8.2 Exposure controls

**Engineering measures:** Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1.

**Individual protection measures:** Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

**Hygiene measures:** Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking, smoking or using the lavatory.

**Eye/face protection:** Wear safety glasses with unperforated side shields or protective splash goggles during use.

**Hand protection:** Wear gloves made of polyethylene or Viton® or those recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

**Skin protection:** Wear protective clothing. Wear protective boots if the situation requires.

**Respiratory protection:** Always use an approved respirator when vapor/aerosols exceed permissible exposure limits. Where risk assessment shows air-purifying respirators are appropriate use a half-mask respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

**Environmental exposure controls:** Do not empty into drains.

*PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly select, maintain, clean fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure adequate protection*



## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Clear, colorless liquid
Odor	Characteristic, hydrocarbon
Odor Threshold	No data available
Molecular Weight	Not applicable
Chemical Formula	Not applicable
pH	No data available
Freezing/Melting Point	No data available
Boiling Point Range	149 - 218 °C (300 - 425 °F)
Evaporation Rate	No data available
Flammability (solid, gas)	Not applicable
Flash Point	39.4 - 65 °C (103 - 149 °F)
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Lower Explosive Limit (LEL)	No data available
Upper Explosive Limit (UEL)	No data available
Vapor Pressure	No data available
Vapor Density	No data available

<b>Specific Gravity</b>	0.758 - 0.790
<b>Viscosity</b>	No data available
<b>Solubility in Water</b>	Insoluble
<b>Partition Coefficient (n-octanol/water)</b>	log P <sub>ow</sub> = 4 - 6
<b>Oxidizing Properties</b>	Not applicable
<b>Explosive Properties</b>	Not applicable
<b>Volatiles by Weight @ 21 °C</b>	100%

## 9.2 Other Data

No data available

## SECTION 10 – STABILITY AND REACTIVITY

---

### 10.1 Reactivity

This material is stable under normal handling conditions and use.

### 10.2 Chemical Stability

This material is stable under recommended storage and handling conditions.

### 10.3 Possibility of hazardous reactions

Vapors may form explosive mixture with air. Hazardous polymerization will not occur.

### 10.4 Conditions to avoid

High temperatures, sources of ignition, hot surfaces, contact with incompatible materials

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Thermal decomposition products include oxides of carbon and hydrocarbons, hydrocarbon fragments, smoke, toxic fumes and gases.

## SECTION 11 – TOXICOLOGICAL INFORMATION

---

### 11.1 Information on toxicological effects

#### Acute oral toxicity

No data available

#### Acute inhalation toxicity

LC<sub>50</sub>, rat: > 5.28 mg/l

#### Acute dermal toxicity

No data available

#### Skin irritation

Causes skin irritation.

#### Eye irritation

Causes serious eye irritation.

#### Sensitization

No data available

#### Carcinogenicity

Suspected of causing cancer.

#### Genotoxicity

No data available

#### Reproductive toxicity

Suspected of damaging the unborn child.

#### Specific organ toxicity - single exposure

May cause respiratory irritation, drowsiness or dizziness.

#### Specific organ toxicity - repeated exposure

Causes damage to the central nervous system through prolonged and repeated use.

#### Aspiration hazard

May be fatal if swallowed and enters the airways.

### 11.2 Further information

Reports have associated repeated and prolonged occupational exposure to **light petroleum products** with irreversible brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

**Cumene** (CAS #98-82-8): IARC, Group 2B carcinogen - *Possibly carcinogenic to humans*; NTP - *Reasonably anticipated to be a human carcinogen*. Not listed as a carcinogen by ACGIH or OSHA.

**Ethylbenzene** (CAS #100-41-4): IARC, Group 2B carcinogen - *Possibly carcinogenic to humans*; ACGIH, A3 - *Confirmed animal carcinogen with unknown relevance to humans*. Not listed as a carcinogen by NTP or OSHA. Ethylbenzene may have teratogenic effects based upon results of laboratory experiments.

**Naphthalene** (CAS #91-20-3): IARC, Group 2B carcinogen - *Possibly carcinogenic to humans*; ACGIH, A3 - *Confirmed animal carcinogen with unknown relevance to humans*. Not listed as a carcinogen by NTP or OSHA.

**Toluene** (CAS #108-88-3): IARC, Group 3 carcinogen - *Not classifiable as to its carcinogenicity to humans*. Not listed as a carcinogen by ACGIH, NTP or OSHA. Breathing high levels of toluene during pregnancy has been shown to result in children with birth defects and to retard mental abilities and growth. There is evidence that exposure to toluene at work is associated with spontaneous abortion.

Case studies of persons abusing toluene suggest isolated incidences of adverse effects on the fetus including birth defects. Several studies of workers suggest long-term exposure may be related to small increases in spontaneous abortions and changes in some gonadotropic hormones. However, the weight of the evidence does not indicate toluene is a reproductive hazard to humans. Studies in laboratory animals indicate some changes in reproductive organs following high levels of exposure, but no significant effects on mating performance or reproduction were observed. In an epidemiologic study of toluene and pregnancy, occupational exposures to toluene were said to be associated with an increased incidence of renal, urinary, gastrointestinal and cardiac anomalies. Fetotoxicity (reduced fetal weight), behavioral effects (effects of learning and memory) and hearing loss (in males) were observed in the offspring of rats exposed to inhalation of toluene, in the absence of maternal toxicity.

**Xylene** (CAS #1330-20-7): IARC, Group 3 carcinogen - *Not classifiable as to its carcinogenicity to humans*. ACGIH, A4 - *Not classifiable as a human carcinogen*. Not listed as a carcinogen by NTP or OSHA. Xylene is a confirmed animal carcinogen. It is a developmental hazard and may harm the unborn child based on animal information. It has been associated with low birth weight or size and learning disabilities.

Handle in accordance with good industrial hygiene and safety practice.

## SECTION 12 - ECOLOGICAL INFORMATION

---

### 12.1 Toxicity

This product is toxic to aquatic life with long lasting effects.

### 12.2 Persistence and degradability

This product is expected to biodegrade over time.

### 12.3 Bioaccumulation potential

Petroleum distillates, solvent naphthas and other petroleum products have the potential to bioaccumulate.

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Other effects

#### Additional ecological information

Do not allow material to run into surface waters, wastewater or soil.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## SECTION 13 – DISPOSAL CONSIDERATIONS

---

### 13.1 Waste treatment methods

Methods of disposal: The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**RCRA F-Series:** No listings above the reportable threshold (de minimis)

**RCRA U-Series:** Cumene (CAS #98-82-8), U055    Naphthalene (CAS #91-20-3), U165    Toluene (CAS #108-88-3), U220

Xylene (CAS #1330-20-7), U239

## SECTION 14 – TRANSPORTATION INFORMATION

---

**Note:** Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

*A flammable liquid with a flash point at or above 38 °C (100 °F) that does not meet the definition of any other hazard class may be reclassified as a combustible liquid. This provision does not apply to transportation by vessel or aircraft, except where other means of transportation are impracticable.*

*May be reclassified as not regulated for transport in non-bulk packages having a maximum capacity less than or equal to 450 liters (119 gallons).*

*Limited quantity for flammable liquids in Packing Group III when inner packagings are not over 5.0 liters (1.3 gallons) net capacity each, packed in a strong outer packaging.*

**USA DOT (Ground Transportation) – Non-bulk & Bulk**

**Proper Shipping Name** Combustible liquid, n.o.s.  
**Hazard Class** Comb liq  
**UN** NA1993  
**Packing Group** III  
**NAREG** Guide #128  
**Packaging Authorization** Non-Bulk: 49 CFR 173.203; Bulk: 173.241  
**Packaging Exceptions** 49 CFR 173.150

**Drum Label(s)**

Marine Pollutant  
placard for  
IMDG/IMO only

**IMO/IMDG (Water Transportation)**

**Proper Shipping Name** Petroleum distillates n.o.s.  
**Hazard Class** 3  
**UN** UN1268  
**Packing Group** III  
**Marine Pollutant** YES  
**EMS Number** F-E, S-E

**ICAO/IATA (Air Transportation)**

**Proper Shipping Name** Petroleum distillates n.o.s.  
**Hazard Class** 3  
**UN** UN1268  
**Packing Group** III  
**Quantity Limitations** 49 CFR 175.27 and 175.75 - Cargo Aircraft Only: 220 l; Passenger Aircraft: 60 l

**RID/ADR (Rail Transportation)**

**Proper Shipping Name** Petroleum distillates n.o.s.  
**Hazard Class** 3  
**UN** UN1268  
**Packing Group** III

**SECTION 15 - REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for substance or mixture****U. S. Federal Regulations**

**OSHA Hazard Communication Standard:** This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200.

**OSHA Process Safety Management Standard:** This product is not regulated under OSHA PSM Standard 29 CFR 1910.119.

**EPA Risk Management Planning Standard:** This product is not regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

**EPA Federal Insecticide, Fungicide and Rodenticide Act:** This product is not a registered Pesticide under the FIFRA, 40 CFR Part 150.

**Toxic Substance Control Act (TSCA) Inventory:** All substances in this product are listed on the TSCA Inventory. This product contains Nonane (CAS #111-84-2), which is subject to TSCA 12(b) Export Notification.

**Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.4(f)(2)) and Chemical Code Number**  
No listings

**Drug Enforcement Administration (DEA) Lists 1 & 2, Exempt Chemical Mixtures (21 CFR 1310.12(c)) and Code Number**  
*Toluene (CAS #108-88-3):* DEA Chemical code 6594 - 35% by Weight or Volume; exports only; limit applies to toluene or any combination of acetone, ethyl ether, 2-butanone, methyl isobutyl ketone, and toluene if present in the mixture by summing the concentrations for each chemical.

**Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) Chemicals:** No listings

**Superfund Amendments and Reauthorization Act (SARA)****SARA Section 311/312 Hazard Categories**

Flammable liquid and vapor	Harmful if inhaled
May be fatal if swallowed and enters airways	May cause respiratory irritation, drowsiness or dizziness
May be harmful in contact with skin	Suspected of damaging the unborn child
Causes skin irritation and eye irritation	Suspected of causing cancer
Causes damage to the central nervous system through prolonged and repeated exposure	

**SARA 313 Information:** Cumene, Ethylbenzene, Naphthalene, 1,2,4-Trimethylbenzene, Toluene and Xylene are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

**SARA 302/304 Extremely Hazardous Substance:** None of the components of this material are subject to the reporting levels established by these sections of Title III of SARA.

**SARA 302/304 Emergency Planning & Notification:** None of the components of this material are subject to the reporting levels established by these sections of Title III of SARA.

**Comprehensive Response Compensation and Liability Act (CERCLA):** This product contains the following CERCLA reportable substances:

Cumene (CAS #98-82-8): RQ = 2,268 kg (5,000 lb)	Toluene (CAS #108-88-3): RQ = 454 kg (1,000 lb)
Ethylbenzene (CAS #100-41-4): RQ = 454 kg (1,000 lb)	Xylene (CAS #1330-20-7): RQ = 4.54 kg (100 lb)
Naphthalene (CAS #91-20-3): RQ = 45.36 kg (100 lb)	



This product has a Reportable Quantity (RQ) of 2,221.1 lb. (307.2 gal) based on the RQ for *xylene* of 100 lb. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

#### Clean Air Act (CAA)

Cumene, Ethylbenzene, Naphthalene, Toluene and Xylene are Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain Class 1 Ozone depleters.

This product does not contain Class 2 Ozone depleters.

#### Clean Water Act (CWA)

Cumene, Ethylbenzene, Naphthalene, Toluene and Xylene are Hazardous Substances under the CWA.

Ethylbenzene, Naphthalene and Toluene are Priority Pollutants.

Ethylbenzene, Naphthalene and Toluene are Toxic Pollutants.

Petroleum distillates, solvent naphthas and other petroleum products are classified as oil under Section 311 of the CWA and the Oil Pollution Act (OPA) of 1990.

#### U.S. State Regulations

##### California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

**⚠️ WARNING:** This product may expose you to Hexane ( $\leq 41$  ppm) and Toluene, which are known to the state of California to cause birth defects or reproductive harm (developmental). This product will expose you to Benzene ( $\leq 81$  ppm), Cumene, Ethylbenzene and Naphthalene, which are known to the state of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

##### Other U.S. State Inventories

*Cumene* (CAS #98-82-8) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, IL, MA, MN, NJ, NY, PA, RI, WA, WV, WI.

*Ethylbenzene* (CAS #100-41-4) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, IL, ME, MA, MN, NJ, NY, PA, RI, WA, WI.

*Naphthalene* (CAS #91-20-3) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ME, MA, MN, NJ, NY, PA, RI, WV, WI.

*Nonane* (CAS #111-84-2) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, ME, MA, NJ, NY, PA, RI.

*Stoddard Solvent* (CAS #8052-41-3) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, MA, MN, NJ, NY, PA, RI, WI.

*Toluene* (CAS #108-88-3) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, IL, ME, MA, MI, MN, NJ, NY, NC, PA, RI, WA, WI.

*1,2,4-Trimethylbenzene* (CAS #95-63-6) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: DE, MA, MN, NJ, NY, PA.

*Trimethylbenzene* (CAS #25551-13-7) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: NJ, NY, PA, RI, WI.

*Xylene* (CAS #1330-20-7) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, ME, MA, MN, NJ, NY, PA, RI, WA.

#### Canada

##### WHMIS Hazard Classification

Flammable liquid and vapor

May be fatal if swallowed and enters airways

Harmful if inhaled, swallowed or in contact with skin

Causes skin irritation and eye irritation

May cause respiratory irritation, drowsiness or dizziness

Suspected of causing cancer

Suspected of damaging fertility or the unborn child

May cause damage to organs through prolonged or repeated exposure

**Canadian National Pollutant Release Inventory (NPRI):** Cumene, Distillates (petroleum), hydrotreated light, Ethylbenzene, Ethyltoluene (all isomers), Naphthalene, Solvent Naphtha (Petroleum), Medium Aliphatic, Stoddard Solvent, Trimethylbenzene (all isomers) and Xylene and listed on the NPRI.

#### European Economic Community

**WGK, Germany (Water danger/protection):** 3 (highly hazardous to water)

#### Global Chemical Inventory Lists

Country	Inventory Name	Listed
Canada	Domestic Substance List (DSL)	Yes
Canada	Non-Domestic Substance List (NDSL)	No
Europe	Inventory of New and Existing Chemicals (EINECS)	Yes
United States	Toxic Substance Control Act (TSCA)	Yes
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (KECI)	Yes
Philippines	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

\*Yes - All components of this product comply with the inventory requirements administered by the governing country.  
 No - One or more components of this product are not on the inventory or are exempt from listing.

## 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

## SECTION 16 - OTHER INFORMATION

### Hazardous Material Information System (HMIS)

HEALTH	*	2
FLAMMABILITY		2
PHYSICAL HAZARD		0
PERSONAL PROTECTION		C

C = safety glasses, gloves & apron

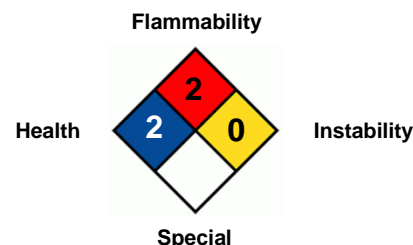
### HMIS Hazard Rating Legend

0 = Minimal 1 = Slight 2 = Moderate  
 3 = Serious 4 = Severe  
 \* = Chronic Health Hazard

### NFPA Hazard Rating Legend

0 = Insignificant 1 = Slight 2 = Moderate  
 3 = High 4 = Extreme

### National Fire Protection Association (NFPA)



### Full Text of GHS Hazard Phrases Referenced in Section 3 (not covered in Section 2)

H225 - Highly flammable liquid and vapor  
 H302 - Harmful if swallowed  
 H312 - Harmful if inhaled  
 H373 - May cause damage to organs through prolonged and repeated exposure  
 H410 - Very toxic to aquatic organisms with long lasting effects

### Abbreviation Key

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists	<b>LD<sub>Lo</sub></b>	Lowest Lethal Dose
<b>ADR</b>	Accord Dangereux Routier (European regulations concerning the international transport of dangerous goods by road)	<b>mppcf</b>	Millions of Particles Per Cubic Foot
<b>CAS</b>	Chemical Abstract Services	<b>NA</b>	North America
<b>CFR</b>	Code of Federal Regulations	<b>NAERG</b>	North American Emergency Response Guide Book
<b>COC</b>	Cleveland Open Cup	<b>NIOSH</b>	National Institute for Occupational Safety & Health
<b>DOT</b>	Department of Transportation	<b>NTP</b>	National Toxicology Program
<b>EC<sub>50</sub></b>	Half maximal effective concentration	<b>OSHA</b>	Occupational Safety and Health Administration
<b>EMS</b>	Emergency Response Procedures for Ships Carrying	<b>PBT</b>	Persistent, Bioaccumulating and Toxic
<b>EPA</b>	Environmental Protection Agency	<b>PEL</b>	Permissible exposure limit
<b>ErC<sub>50</sub></b>	Reduction of Growth Rate	<b>PMCC</b>	Pensky-Martens Closed Cup
<b>ERG</b>	Emergency Response Guide Book	<b>ppm</b>	Parts Per Million
<b>FDA</b>	Food and Drug Administration	<b>RCRA</b>	Resource Conservation and Recovery Act
<b>GHS</b>	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)	<b>RID</b>	Dangerous Goods by Rail
<b>HCS</b>	Hazard Communication Standard	<b>RQ</b>	Reportable Quantity
<b>IARC</b>	International Agency for Research on Cancer	<b>TCC/Tag</b>	Tagliabue Closed Cup
<b>IATA</b>	International Air Transport Association	<b>TLV</b>	Threshold Limit Value
<b>IC<sub>50</sub></b>	Half Maximal Inhibitory Concentration	<b>TSCA</b>	Toxic Substance Control Act
<b>ICAO</b>	International Civil Aviation Organization	<b>TWA</b>	Time-weighted Average
<b>IDLH</b>	Immediately Dangerous to Life and Health	<b>UN</b>	United Nations
<b>IMDG</b>	International Maritime Dangerous Goods	<b>VOC</b>	Volatile Organic Compounds
<b>IMO</b>	International Maritime Organization	<b>vPvB</b>	Very Persistent and Very Bioaccumulating
<b>LC<sub>50</sub></b>	50% Lethal Concentration	<b>WHMIS</b>	Workplace Hazardous Materials Information System
<b>LD<sub>50</sub></b>	50% Lethal Dose		

### DISCLAIMER OF RESPONSIBILITY

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume damage or expense arising out of or in any way responsibility and expressly disclaim liability for loss, connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

Revision date: 28 June 2021, Version 3

<end of document>