Material Safety Data Sheet
Material Name:  Genuine Safety Solvent No. 140
ID: HB-019

**Section 1 - Chemical Product and Company Identification**

- **Part Number:** 212946 (55 Gal); 212938 (5 Gal); 212911 (Bulk)
- **Manufacturer's Part Number:** NA
- **Chemical Name:** Petroleum Solvent
- **Product Use:** Solvent
- **Synonyms:** Stoddard Solvent, Mineral Spirits
- **Manufacturer Information**
  Warren Oil
  2340 Hwy 301 North
  Dunn, North Carolina

**Section 2 - Composition / Information on Ingredients**

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>64741-92-0</td>
<td>Naphtha, petroleum, solvent-refined heavy</td>
<td>98-100</td>
</tr>
<tr>
<td>91-20-3</td>
<td>Naphthalene</td>
<td>0-2</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Xylenes (o-, m-, p- isomers)</td>
<td>0-2</td>
</tr>
<tr>
<td>95-63-6</td>
<td>1,2,4-Trimethylbenzene</td>
<td>0-1</td>
</tr>
</tbody>
</table>

Component Information/Information on Non-Hazardous Components
This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

**Section 3 - Hazards Identification**

**Emergency Overview**
Product is a colorless, combustible liquid with typical mineral spirits odor. This product is harmful by inhalation, when in contact with the skin and if it is swallowed. Liquid and vapor may be irritating to the eyes, skin and respiratory system. Product may cause central nervous system (CNS) depression characterized by nausea, dizziness, headache, lack of coordination, loss of consciousness and coma. Extinguish fire with carbon dioxide, dry chemical, foam or water fog.

**Hazard Statements**
Combustible liquid and vapor. Liquid and vapor may be irritating to the eyes, skin and respiratory system. Pulmonary aspiration hazard if swallowed. This product may be harmful by inhalation, ingestion and if absorbed through the skin. Exposure to high concentrations of vapor may cause central nervous system depression, cardiac arrhythmias, kidney and liver damage, decreased blood counts, cataracts, allergic skin sensitization reactions and irreversible nervous system damage. Product is harmful to the fetus.

**Potential Health Effects: Eyes**
This product may cause severe burning sensation with temporary irritation and swelling of eyelids. Vapors may also produce eye irritation. Chronic exposure may result in cataracts and reduces visual reaction time.

**Potential Health Effects: Skin**
Harmful or fatal if absorbed through the skin. Irritation and burning sensation may occur upon exposure to liquid or vapor. Prolonged or repeated contact with this product may dry and/or defat the skin. Prolonged or repeated contact may result in allergic skin sensitization reactions.

**Potential Health Effects: Ingestion**
Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion of this product may result in central nervous system depression including headache, weakness, dizziness, loss of coordination and judgement and coma. Small amounts of this product, if aspirated into the lungs, may cause mild to severe pulmonary injury, possibly death. Ingestion of this product may cause decreased blood counts, liver and kidney damage. Chronic exposure may result in irreversible damage to the nervous system and cataracts.
Potential Health Effects: Inhalation
Inhalation of oil mists or fumes can cause irritation of the nose, throat and upper respiratory tract. High vapor/aerosol concentrations are irritating to the eyes and respiratory tract, and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death. Prolonged or repeated exposure may result in allergic lung sensitization reactions characterized by asthma, coughing and wheezing. Inhalation of this product may result in toxic effects on the blood, perspiration, kidney and liver damage. Chronic exposure may result in irreversible damage to the nervous system and cataracts.

HMIS Ratings: Health: 2* Fire: 2 Reactivity: 0 Pers. Prot.: safety glasses or chemical goggles, gloves
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 4 - First Aid Measures ***
First Aid: Eyes
Flush eyes with large amounts of water for 15 minutes. Get medical attention if eye irritation develops or persists.
First Aid: Skin
For skin contact flush with large amounts of water. Get medical attention if skin disorder develops. Launder contaminated clothing before reuse.
First Aid: Ingestion
If the material is swallowed, get immediate medical attention or advice. Do not induce vomiting.
First Aid: Inhalation
Remove to fresh air. Get medical attention if symptoms persist.
First Aid: Notes to Physician
Pulmonary aspiration hazard if swallowed; treat symptomatically.

*** Section 5 - Fire Fighting Measures ***
Flash Point: >142 F; >61 C
Upper Flammable Limit (UFL): 6%
Auto Ignition: >400 F
Rate of Burning: Not determined
General Fire Hazards
Fire and explosion hazards are moderate when this product is exposed to heat or flame.
Hazardous Combustion Products
Combustion may yield fumes, smoke, carbon monoxide, carbon dioxide and aldehydes and acids.
Extinguishing Media
Dry chemical, foam, carbon dioxide, water fog. Use water to cool fire-exposed containers and to protect personnel.
Fire Fighting Equipment/Instructions
Do not point solid water stream directly into burning oil to avoid spreading. Use water spray to cool fire-exposed containers and as a protective screen. Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

NFPA Ratings: Health: 2 Fire: 2 Reactivity: 0 Other:
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***
Containment Procedures
Contain the discharged material.
Clean-Up Procedures
Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Dispose of spent absorbent in an approved industrial waste landfill.
Evacuation Procedures
Isolate area. Keep unnecessary personnel away. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Special Procedures
Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. Surfaces may become slippery after spillage. Wear appropriate protective equipment and clothing during clean-up. Do not allow the spilled product to enter public drainage system or open water courses.

Section 7 - Handling and Storage

Handling Procedures
Avoid getting this material into contact with your skin and eyes. Avoid prolonged or repeated breathing of this material. Use this product with adequate ventilation. Wash thoroughly after handling. Keep this product from heat, sparks, or open flame.

Storage Procedures
Keep the container tightly closed and in a cool, well-ventilated place. Do not store this material in open or unlabeled containers. Eliminate all sources of ignition. Store away from strong oxidizers. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode.

Section 8 - Exposure Controls / Personal Protection

Exposure Guidelines
A: General Product Information
If oil mists are generated, observe the OSHA exposure limit of 5 mg/m3; short term exposure limit of 10 mg/m3.

B: Component Exposure Limits
Xylenes (o-, m-, p- isomers) (1330-20-7)
ACGIH: 100 ppm TWA; 434 mg/m3 TWA
150 ppm STEL; 651 mg/m3 STEL
OSHA: 100 ppm TWA; 435 mg/m3 TWA
150 ppm STEL; 655 mg/m3 STEL
NIOSH: 100 ppm TWA; 435 mg/m3 TWA

Naphthalene (91-20-3)
ACGIH: 10 ppm TWA; 52 mg/m3 TWA
15 ppm STEL; 79 mg/m3 STEL
OSHA: 10 ppm TWA; 50 mg/m3 TWA
15 ppm STEL; 75 mg/m3 STEL
NIOSH: 10 ppm TWA; 50 mg/m3 TWA

1,2,4-Trimethylbenzene (95-63-6)
NIOSH: 25 ppm TWA; 125 mg/m3 TWA

Engineering Controls
Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

PERSONAL PROTECTIVE EQUIPMENT
Personal Protective Equipment: Eyes/Face
Wear safety glasses; chemical goggles (if splashing is possible).

Personal Protective Equipment: Skin
Wear impervious gloves. Wear oil-impervious garments if contact is unavoidable.

Personal Protective Equipment: Respiratory
If mist is generated (heating, spraying) and engineering controls are not sufficient, wear approved organic vapor respirator suitable for oil mist.

Personal Protective Equipment: General
Use good hygiene when handling petroleum product.

Section 9 - Physical & Chemical Properties
Material Safety Data Sheet

Material Name: Genuine Safety Solvent No. 140

**Appearance:** Colorless

**Physical State:** Liquid

**Vapor Pressure:** 0.1 psi @ 100 F

**Boiling Point:** 360-400 F @ 760 mmHg

**Solubility (H2O):** Trace

**Freezing Point:** Not determined

**Bulk Density:** 6.6 lbs/gal

**Odor:** Typical mineral spirits

**pH:** Not applicable

**Vapor Density:** Not available

**Melting Point:** Not applicable

**Specific Gravity:** 0.79 @ 60 F

**Evaporation Rate:** 0.2 (Butyl acetate=1)

**Percent Volatile:** Essentially 100%

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**Section 10 - Chemical Stability & Reactivity Information**

**Chemical Stability**

Stable

**Conditions to Avoid**

Avoid excessive heat and all sources of ignition.

**Incompatibility**

This product may react with strong oxidizing agents.

**Hazardous Decomposition**

Carbon monoxide, carbon dioxide and aldehydes and acids.

**Hazardous Polymerization**

Hazardous polymerization will not occur.

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**Section 11 - Toxicological Information**

**Acute Toxicity**

**A: General Product Information**

Petroleum naphtha (heavy) is predicted to be an eye, skin and respiratory system irritant and a central nervous system (CNS) depressant in acute exposure. Symptoms of CNS depression include nausea, headache, weakness, dizziness, loss of coordination and judgement and coma. Heavy naphtha is not expected to be as hazardous by inhalation as other lighter naphthas because it is less volatile. Pulmonary aspiration of even small amounts of this product may produce potentially fatal chemical pneumonitis. Chronic exposure to petroleum naphtha caused CNS damage, heart and blood forming effects. Blood forming effects are attributed to the benzene content of petroleum naphtha. Chronic exposure to some naphthas has been associated with liver and kidney damage. 1,2,4-Trimethylbenzene is irritating to the eyes, skin and respiratory tract. It can cause CNS depression and thrombocytopenia. Symptoms of exposure may include fatigue, nausea and anxiety. Allergic lung sensitization reactions characterized by asthma, coughing and wheezing may be provoked by chronic exposure to 1,2,4-trimethylbenzene. Naphthalene can cause poisoning by any route of exposure. When ingested may produce nausea, vomiting, abdominal cramps, diarrhea, malaise, convulsions, coma, hemoglobinuria, hemolysis, hematuria, anemia, fever and liver and kidney damage. When inhaled can produce CNS depression, headache, excitement, nausea, vomiting, sweating and hemoglobinuria. Chronic exposure may result in hemolytic anemia, jaundice, cataracts, allergic reactions, possible neurotoxicity and aplastic anemia. Xylene can be absorbed by inhalation and through the skin. It is an eye, skin and respiratory tract irritant. May cause formation of vacuoles in the eyes and skin. Exposure may cause CNS depression, nausea, vomiting, shivering, loss of appetite, tremors, disturbed vision, prolonged visual reaction time, salvation, difficulty breathing, abdominal pain, liver and kidney damage and cardiac arrhythmias. Chronic inhalation caused headache, tremors, apprehension, memory loss, weakness, dizziness, anemia and hyperplasia but not destruction to bone marrow. Xylene exposure has caused irreversible damage to the central nervous system and has been ototoxic.

**B: Component Analysis - LD50/LC50**

**Xylenes (o-, m-, p- isomers) (1330-20-7)**

Inhalation LC50 Rat: 5000 ppm/4H

Oral LD50 Rat: 4300 mg/kg

Dermal LD50 Rabbit: >1700 mg/kg

**Naphthalene (91-20-3)**

Inhalation LC50 Rat: >340 mg/m3/1H

Oral LD50 Rat: 490 mg/kg

Oral LD50 Mouse: 533 mg/kg

Dermal LD50 Rabbit: >20 gm/kg

**1,2,4-Trimethylbenzene (95-63-6)**

Inhalation LC50 Rat: 18 gm/m3/4H
Carcinogenicity

A: General Product Information
No information available for the product.

B: Component Carcinogenicity
Xylenes (o-, m-, p- isomers) (1330-20-7)
ACGIH: A4 - Not Classifiable as a Human Carcinogen
IARC: Monograph 47; 1989 (Group 3 (not classifiable))

Naphthalene (91-20-3)
ACGIH: A4 - Not Classifiable as a Human Carcinogen

Epidemiology
No data available for product. Sudden death from cardiac arrhythmias may result from repeated exposure to solvents contained in this product. This is due to a decrease in the myocardial threshold to the arrhythmogenic effects of epinephrine (adrenaline).

Neurotoxicity
Central nervous system depression may result upon acute exposure to this product. Chronic exposure to this product may result in brain damage (encephalopathy) characterized by loss of memory and personality changes. Chronic xylene exposure has produced irreversible damage to the CNS referred to as vegetative dystonia. Xylene may be ototoxic in chronic exposure characterized by damaged hearing or enhanced sensitivity to noise. Chronic exposure may result in reduced memory and concentration, personality changes, fatigue, sleep disturbances, reduced coordination, and peripheral neuropathy characterized by the sensation of pins and needles in arms and legs.

Mutagenicity
No data available on this product as a whole. Naphthalene induced DNA strand breaks 3-fold in livers of rats administered a single oral dose. It is not mutagenic in the Ames Salmonella microsome assay but enhances the mutagenicity of benzo(a)pyrene and 2-aminonaphthalene.

Teratogenicity
No data available for this product as a whole. Naphtha in general has been linked with birth defects and menstrual disturbances in humans. Naphtha is not a confirmed human reproductive hazard because of poorly documented or mixed exposures. Xylene crosses the placenta in humans and mice and is found in human breast milk. The risk of spontaneous abortion increased 3.1 fold in women exposed to xylene three times a week in the first trimester but no increased birth defects were seen. Xylene may effect menstruation and lower testicular and prostate weights. Prenatal exposure to naphthalene has been fatal to the unborn. Naphthalene may cause methemoglobinemia and or hemolytic anemia which are very dangerous to the unborn. Inhalation of naphthalene during pregnancy has caused jaundice, anemia and/or methemoglobinemia in newborns. In rats, naphthalene has caused retarded skull formation, caused cataracts and retarded cardiac development.

Other Toxicological Information
No other information available.

Ecotoxicity

A: General Product Information
No information is available on ecotoxicity of this product. Keep product out of sewers and waterways.

Xylene 96 H LC50: fathead minnow: 16 mg/L (flow-through bioassay).
Naphthalene 96 H LC50: pink salmon, larval rainbow trout, fathead minnow: 1.2-6.4 mg/L.

B: Ecotoxicity - Aquatic Toxicity
This material has not been analyzed.
Environmental Fate

No information is available. Naphthalene readily degrade in the atmosphere with a half-life of 3-8 hours. Releases into water are lost by volatilization, photolysis, adsorption and biodegradation. Bioconcentration occurs but it is expected to be a short-term problem because of depuration and metabolism. When released to the soil, naphthalene is adsorbed moderately to the soil and undergoes biodegradation. 1,2,4-Trimethylbenzene, if released to the air, will exist in the vapor phase, and will be degraded by photochemical reactions with hydroxyl radicals and nitrate radicals. It should have low mobility in the soil and is expected to volatilize from moist and dry soil. It is expected to aerobically biodegrade in both soil and water unless in high enough concentration to be toxic to the microorganisms. Anaerobic biodegradation is not expected. In water, 1,2,4-trimethylbenzene is expected to moderately bioconcentrate. It is expected to adsorb to sediment and particulate matter. Unbound 1,2,4-trimethylbenzene is expected to volatilize from water and is expected to photodegrade in water. Xylene will photochemically degrade by reactions with hydroxyl radicals and half-life is 1-18 hours. Xylene will volatilize from water. Xylenes are moderately mobile in soil and may leach into groundwater where it may persist for many years. Bioconcentration is not expected to be significant.

* * *  Section 13 - Disposal Considerations  * * *

US EPA Waste Number & Descriptions

A: General Product Information
Wastes may be classified as D001 Ignitable waste. User must test waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers
Xylenes (o-, m-, p- isomers) (1330-20-7)
  RCRA: waste number U239 (Igniternal waste; Toxic waste)
Naphthalene (91-20-3)
  RCRA: waste number U165

Disposal Instructions
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

* * *  Section 14 - Transportation Information  * * *

US DOT Information

Shipping Name: Not Regulated as a Hazardous Material (for non-bulk packaging only)
Hazard Class: None
UN/NA #: None
Packing Group: None
Required Label(s): None
Additional Info.: For domestic bulk packagings (over 119 gallons), this product must be classified as "Combustible Liquid, n.o.s. (petroleum naphtha), NA 1993, PGIII"

International Transportation Regulations
Not regulated as dangerous goods.

* * *  Section 15 - Regulatory Information  * * *

US Federal Regulations

A: General Product Information
This product may be classified as an oil under Section 311 of the Clean Water Act, and under the Oil Pollution Act. Discharges of spills into or leading to surface waters that cause sheen must be reported to the National Response Center. (1-800-424-8802)

B: Component Analysis
This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).
Material Safety Data Sheet

Material Name: Genuine Safety Solvent No. 140  ID: HB-019

Xylenes (o-, m-, p- isomers) (1330-20-7)
SARA 313: form R reporting required for 1.0% de minimus concentration
CERCLA: final RQ = 100 pounds (45.4 kg)
Naphthalene (91-20-3)
SARA 313: form R reporting required for 1.0% de minimus concentration
CERCLA: final RQ = 100 pounds (45.4 kg)
1,2,4-Trimethylbenzene (95-63-6)
SARA 313: form R reporting required for 1.0% de minimus concentration

State Regulations
A: General Product Information
Other state regulations may apply. Check individual state requirements.
B: Component Analysis - State
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>CA</th>
<th>FL</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes (o-, m-, p- isomers)</td>
<td>1330-20-7</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>95-63-6</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

Other Regulations
A: General Product Information
No additional information.
B: Component Analysis - Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>DSL</th>
<th>EINECS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha, petroleum, solvent-refined heavy</td>
<td>64741-92-0</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Xylenes (o-, m-, p- isomers)</td>
<td>1330-20-7</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
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<td>Naphthalene</td>
<td>91-20-3</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>95-63-6</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

C: Component Analysis - WHMIS IDL
The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>1% item 1108 (1181)</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>95-63-6</td>
<td>0.1% item 1640 (1684)</td>
</tr>
</tbody>
</table>

** Section 16 - Other Information **

Other Information
This information is, to the best of Warren Oil’s knowledge and belief, accurate and reliable. However, no representation, warranty, or guarantee is made to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitableness and completeness of such information for his own particular use.

Key/Legend
N = No; Y = Yes; ppm - parts per million; mg/m3 = milligrams per cubic meter of air; ACGIH = American Conference of Governmental Industrial Hygienists; OSHA = Occupational Safety and Health Administration; TLV = Threshold Limit Value; NIOSH = National Institute of Occupational Safety and Health; NTP = National Toxicology Program; IARC = International Agency for Research on Cancer; EPA = Environmental Protection Agency.

MSDS History

Contact:
Contact Phone:

This is the end of MSDS # HB-019