1. Product Identification

Product name: Spar Urethane Varnish Satin
SDS Number: 1855500
Product type: Oil-modified urethane polymer.
Recommended use of the chemical and restrictions on use: Directed at, but not limited to, the finishing and coating of wood.
Restrictions: None known.
Manufacturer/Supplier information
Company name: SYSTEM THREE RESINS, INC.
Address: 8517 Commerce Place Dr NE
Lacey, WA 98516
United States
Telephone: 1-253-333-8118
Website: www.systemthree.com
Email: support@systemthree.com
Emergency Contact
CHEMT (U.S. and CANADA) 1-800-704-9215
CHEMT (Outside the U.S.) – Call Collect accepted +1-360-256-7365

2. Hazard(s) Identification

Classification of substance or mixture/Signal Word
WARNING!
Flammable liquid – Category 3
Serious Eye Damage/Irritation – Category 2B

GHS Label Elements
Hazard Pictograms

Hazard Statements-Classification of substance or mixture
H226 Flammable liquid and vapor.
H320 Causes eye irritation.

Precautionary statements
Precautionary Statements
Prevention
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/Bond container and receiving equipment.
P241 Use ventilating equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/eye protection/face protection.

Response
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

P337+P313

Store in a well-ventilated place. Keep cool.

P403+P235

Dispose of contents and container in accordance with all local, regional, national and international regulations.

P501

Hazards not otherwise classified (HNOC)

None Available.

### 3. Composition/Information On Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Content (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Spirits</td>
<td>8052-41-3</td>
<td>20 – 30%</td>
</tr>
<tr>
<td>Solvent Naphtha (Petroleum), Light aromatic</td>
<td>64742-95-6</td>
<td>5 – 10%</td>
</tr>
</tbody>
</table>

There are no additional ingredients present 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. Occupational exposure limits, if available, are listed in Section 8.

### 4. First-Aid Measures

**Skin contact**

Remove contaminated clothing and shoes and wipe excess off skin. Flush skin with water for at least 15 minutes. Follow by washing in soap and water. If irritation occurs, seek medical attention. Do not reuse clothing until cleaned.

**Eye contact**

Flush with water for 15 minutes holding eye lids open. Get medical attention, if irritation occurs or persists.

**Ingestion**

Do not give anything if victim is unconscious or very drowsy. DO NOT INDUCE VOMITING. Seek medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

**Inhalation**

Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician**

Treat symptoms as they appear.

**Specific treatments**

No specific treatments.

### 5. Fire-Fighting Measures

**Suitable extinguishing media**

Foam, carbon dioxide, dry chemical, water fog.

**Unsuitable extinguishing media**

None known

**Specific hazards arising from the chemical**

Carbon monoxide and unidentified organic compounds may be formed during combustion.

**Hazardous decomposition products**

Carbon monoxide

**Special protective actions for fire-fighters**

When fighting chemical fires wear full bunker gear, including a positive pressure NIOSH approved self-contained breathing apparatus (SCBA). Water spray may be used to cool fire-exposed containers. When heated above the flash point, this material emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

**Special protective equipment for firefighters**

Full fire suit and self-contained breathing apparatus.

**Further information**

None.
6. Accidental Release Measures

**Personal precautions**

Wear proper personal protective equipment (PPE). Avoid direct contact with material. Proper PPE includes: disposable gloves, eye protection and skin protection.

**Emergency procedures**

If material is spilled, avoid contact with material. Persons not wearing appropriate protective equipment should leave the area of the spill until cleanup is complete. Stop spill at source, dike area to prevent spreading, pump liquid to salvage tank or drum. Remaining liquid may be taken up on clay, diatomaceous earth, sawdust, or other absorbent, and shoveled into disposal containers.

**Methods and materials for containment/cleanup**

Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from vapors. Only specially trained or qualified personnel should handle the emergency. Take up the spilled liquid with sand, earth, or other noncombustible absorbent material and place in a plastic container where applicable.

**Environmental precautions**

None known.

7. Handling and Storage

**Precautions for safe handling**

Read carefully all cautions and directions on product label before use.

**Precautions/Recommendations for safe/proper storage**

Keep away from heat, sparks, and open flame, and out of the reach of pets or children. Surfaces that are hot may ignite even liquid products in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone. 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 and cause injury or death. Store in cool, dry place.

8. Exposure Controls/Personal Protection

**Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>List</th>
<th>Components</th>
<th>CAS No.</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA Exposure Limits</td>
<td>Mineral Spirits</td>
<td>8052-41-3</td>
<td>TWA</td>
<td>2900 mg/m³ 8 hrs 500 ppm 8 hrs</td>
</tr>
<tr>
<td>ACGIH Exposure Limits</td>
<td>Mineral Spirits</td>
<td>8052-41-3</td>
<td>TWA</td>
<td>525 mg/m³ 8 hrs 100 ppm 8 hrs</td>
</tr>
<tr>
<td>OSHA Exposure Limits</td>
<td>Solvent Naphtha (Petroleum), Light Aromatic</td>
<td>64742-95-6</td>
<td>TWA</td>
<td>Not Established</td>
</tr>
<tr>
<td>ACGIH Exposure Limits</td>
<td>Solvent Naphtha (Petroleum), Light Aromatic</td>
<td>64742-95-6</td>
<td></td>
<td>Not Established</td>
</tr>
</tbody>
</table>

**Appropriate engineering controls**

Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits. General mechanical ventilation or local exhaust should be suitable to keep vapor concentrations below TLV. Ventilation equipment must be explosion proof.

**Environmental exposure controls**

Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.
Individual protection measures/Personal protective equipment

Eye/face protection
Chemical splash goggles and face shield in compliance with OSHA regulations are advised; however, OSHA regulations also permit other types of safety glasses. (Consult your industrial hygienist).

Hand protection
Wear chemical resistant gloves such as: Poly Vinyl Alcohol (PVA), Viton, or Teflon gloves or consult your safety equipment supplier.

Skin protection
Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. The equipment must be cleaned thoroughly after each use.

Respiratory protection
Use a NIOSH-approved respiratory device or air-supplied respirator if exposure exceeds any occupational limits. In accord with 29 CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

Special instructions for protection and hygiene
Use good personal hygiene when handling this product. Wash hands after use before eating, drinking, smoking or using the toilet. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. If clothing is contaminated, discard or launder.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical and Chemical Properties</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical family</td>
<td>Urethane</td>
</tr>
<tr>
<td>Appearance</td>
<td>Translucent liquid</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form</td>
<td>Satin liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Amber</td>
</tr>
<tr>
<td>Odor</td>
<td>Pungent odor</td>
</tr>
<tr>
<td>Density (Specific Gravity)</td>
<td>0.913</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Data not available</td>
</tr>
<tr>
<td>pH</td>
<td>Data not available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Data not available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>157 to 196°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>38°C (100°F)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Slower than ether</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Data not available</td>
</tr>
<tr>
<td>Upper/lower flammability limit (by volume)</td>
<td>LEL: 1.00</td>
</tr>
<tr>
<td></td>
<td>UEL: 6.00</td>
</tr>
<tr>
<td>Upper flammability limit (by volume)</td>
<td>12.8</td>
</tr>
<tr>
<td>Lower flammability limit (by volume)</td>
<td>0.01</td>
</tr>
<tr>
<td>Material VOC</td>
<td>440-450 g/l (3.75 lb/gal)</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>Relative density</td>
<td>Data not available</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Not determined</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Data not available</td>
</tr>
</tbody>
</table>
Auto-ignition temperature  Data not available
Decomposition temperature  Data not available

10. Stability and Reactivity

Reactivity  None
Chemical Stability  Stable
Possibility of hazardous reactions  Hazardous polymerization will not occur.
Conditions to avoid  Avoid extreme heat, sources of ignition.
Incompatible materials  Strong oxidizing agents, Lewis and mineral acids.
Hazardous decomposition products  None known.
Other hazards  None known.

11. Toxicological Information

Acute Health Hazard  No comprehensive data (ingestion, inhalation, dermal) on mixture (product).

<table>
<thead>
<tr>
<th>Component</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Spirits</td>
<td>Dermal LD50: 3,160 mg/kg</td>
<td>Rabbit</td>
<td>-</td>
</tr>
<tr>
<td>Solvent Naphtha (Petroleum), Light Aromatic</td>
<td>Oral LD50: &gt;14,000 mg/kg</td>
<td>Sprague-Dawley</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Dermal LD50: &gt;2,000 mg/kg</td>
<td>Rabbit</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Inhalation LC50: 6,000 – 10,000 mg/m3 (C9 aromatic naphtha)</td>
<td>Rat</td>
<td>4h</td>
</tr>
</tbody>
</table>

Irritation/Corrosion  No information on the product itself.
Sensitization  No information on the product itself.
Mutagenicity  No information on the product itself.
Carcinogenicity  No information on the product itself.
Reproductive Toxicity  No information on the product itself.
Teratogenicity  No information on the product itself.
Specific target organ toxicity (single exposure)  No information on the product itself.
Specific target organ toxicity (repeated exposure)  No information on the product itself.
Aspiration hazard  No information on the product itself.

Potential acute health effects
Eye Contact  Liquid is moderately irritating to the eyes. High vapor concentrations may also be irritating. Direct contact with the liquid or exposure to its vapors or mists may cause stinging, tearing, redness.
Inhalation  High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis and loss of consciousness).
Skin Contact
Liquid is mildly irritating to the skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Ingestion
Liquid is moderately toxic and may be harmful if swallowed; may produce CNS depression. Ingestion of product may result in vomiting; aspiration (breathing) of vomitus into the lungs must be avoided as even small quantities may result in aspiration pneumonitis.

Delayed and immediate effects and also chronic effects from short and long term exposure

Potential chronic health effects
No information on the product itself.

General
Persons with pre-existing skin, eye, or central nervous system disorders, or impaired liver, kidney, or pulmonary function may be susceptible to the effects of this substance. Reports have associated repeated and prolonged occupational overexposure to solvents with irreversible brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

Carcinogenicity
No comprehensive data available showing potential carcinogenicity by OSHA, NTP, or IARC.

Mutagenicity
No information on the product itself.

Teratogenicity
No information on the product itself.

Developmental effects
No information on the product itself.

Fertility effects
No information on the product itself.

Numerical measures of toxicity

Acute toxicity estimates (ATEmix)
No data available

12. Ecological Information

Ecotoxicity
No information on the product itself.

<table>
<thead>
<tr>
<th>Component</th>
<th>Test</th>
<th>Endpoint</th>
<th>Exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent Naphtha (Petroleum), Light Aromatic</td>
<td>OECD 203 Fish, Acute Toxicity Test</td>
<td>Acute LC50</td>
<td>96 hr</td>
<td>Fish</td>
<td>9.2 mg/l</td>
</tr>
</tbody>
</table>

Persistence and degradability
No information on the product itself.

Bioaccumulative Potential
No information on the product itself.

Mobility in Soil
No information on the product itself.

Soil/water partition coefficient (KOC)
No data available.

Other adverse effects
No data available.

13. Disposal Considerations

Waste from residues/ unused products
The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste
generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**Contaminated packaging**
Dispose of container and unused contents in accordance with federal, state, and local requirements.

### 14. Transport Information

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

#### International Transport Regulations

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN/NA number</th>
<th>Proper Shipping Name</th>
<th>Classes/*PG</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>UN1263</td>
<td>Paint</td>
<td>3 III</td>
<td></td>
</tr>
<tr>
<td>TDG</td>
<td>UN1263</td>
<td>Paint</td>
<td>3 III</td>
<td></td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>UN1263</td>
<td>Paint</td>
<td>3 III</td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>UN1263</td>
<td>Paint</td>
<td>3 III</td>
<td></td>
</tr>
</tbody>
</table>

*PG: Packing group

**Special precautions for user:** Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

### 15. Regulatory Information

#### UNITED STATES

**U.S. Federal Regulations**

- United States – TSCA 12(b) – Chemical export notification: None Required.
- United States – TSCA 5(a)2 – Final significant new use rules: Not Listed.
- United States – TSCA 5(a)2 – Proposed significant new use rules: Not Listed.
- United States – TSCA 5(e) – Substance consent order: Not listed.

**Clean Air Act – Ozone Depleting Substances (ODS)**
None known.

**Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)**
None known.

**Pennsylvania – RTK**
None known.

**California Prop. 65**
This product does not contain chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

**EPA SARA 302/304 Extremely Hazardous Substances**
To the best of our knowledge, this product is not listed as an extremely hazardous substance.

**EPA SARA 311/312 Hazardous Chemicals**
This product should be reported as immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.

**SARA 313 Form R – Reporting requirements**
Toluene (CAS 108-88-3) and Benzene (CAS 71-43-2).

**CERCLA Hazardous substances**
CERCLA RQ: 1000 lbs.

**United States inventory (TSCA 8b)**
All components are listed or exempted.

#### CANADA

**WHMIS (Canada)**
Class B-2: Flammable liquid.
Class D-2B: Material causing other toxic effects (Toxic).
Canadian NPRI: None Required
CEPA Toxic substances: None Required

INTERNATIONAL REGULATIONS
International Lists
- **Australia inventory (AICS):** All components are listed or exempted.
- **Canada inventory:** All components are listed or exempted.
- **Japan inventory:** All components are listed or exempted.
- **China inventory (IECSC):** All components are listed or exempted.

16. Other Information, Including Date of Preparation or Last Revision

**HMIS Rating**
- Health: 2
- Flammability: 2
- Physical Hazard: 0

**Date of Preparation:** January 24, 2020
**Date of Last Revision:** September 23, 2019
**Revision #**
- 5.0
**More Information**
- 1-253-333-8118
**Prepared by**
- System Three Resins Inc.

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