1. Product And Company Identification

Product Name: STP® Fuel System Cleaner for Ethanol Fuels

Responsible Party: STP Products Manufacturing Company
44 Old Ridgebury Road
Suite 300
Danbury, CT 06810

Information Phone Number: +1 203-205-2900
Emergency Phone Number:
For Medical Emergencies, call 1-866-949-6465 / +1 303-389-1332 (Outside US and Canada)
For Transportation Emergencies, call 1-800-424-9300 (Chemtrec) +1-703-527-3887 for Outside US and Canada (call collect)

SDS Date of Preparation: 01/30/2018
Product Use and Uses Advised Against: Automotive maintenance product – For consumer and professional use

2. Hazards Identification

Note: This product is a consumer product and is labeled in accordance with the Consumer Product Safety Commission regulations and not OSHA regulations. The requirements for the labeling of consumer products take precedence over OSHA labeling so the actual product label will not contain the OSHA label elements shown below on this SDS.

GHS Classification:

<table>
<thead>
<tr>
<th>Physical:</th>
<th>Health:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable Liquid Category 3</td>
<td>Acute Toxicity Category 4 (Inhalation)</td>
</tr>
<tr>
<td></td>
<td>Eye Irritation Category 2A</td>
</tr>
<tr>
<td></td>
<td>Skin Irritation Category 2</td>
</tr>
<tr>
<td></td>
<td>Carcinogen Category 1A</td>
</tr>
<tr>
<td></td>
<td>Germ Cell Mutagenicity Category 1B</td>
</tr>
<tr>
<td></td>
<td>Toxic to Reproduction Category 2</td>
</tr>
<tr>
<td></td>
<td>Specific Target Organ Toxicity</td>
</tr>
<tr>
<td></td>
<td>– Single Exposure Category 3</td>
</tr>
<tr>
<td></td>
<td>(Respiratory Irritation, Central Nervous System effects)</td>
</tr>
<tr>
<td></td>
<td>Specific Target Organ Toxicity</td>
</tr>
<tr>
<td></td>
<td>– Repeat Exposure Category 2</td>
</tr>
<tr>
<td></td>
<td>Aspiration Hazard Category 1</td>
</tr>
</tbody>
</table>

GHS Label Elements:

Danger!
STP® Fuel System Cleaner for Ethanol Fuels

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerosene</td>
<td>8008-20-6 / 64742-81-0</td>
<td>15 – 100%</td>
</tr>
<tr>
<td>Petroleum distillates hydro desulfurized light</td>
<td>68333-25-5</td>
<td>0 - 85%</td>
</tr>
<tr>
<td>catalytic cracked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petroleum distillates straight run middle</td>
<td>64741-44-2</td>
<td>0 - 85%</td>
</tr>
<tr>
<td>Petroleum distillates, hydro desulfurized</td>
<td>64742-80-9</td>
<td>0 - 85%</td>
</tr>
<tr>
<td>middle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petroleum distillates light hydrocracked</td>
<td>64741-77-1</td>
<td>1 – 25%</td>
</tr>
<tr>
<td>Solvent naphtha, light aromatic</td>
<td>64742-95-6</td>
<td>5 – 15%</td>
</tr>
<tr>
<td>Monoalkylaryl alkoxylate aminated</td>
<td>Trade Secret</td>
<td></td>
</tr>
<tr>
<td>1,2,4-Trimethyl- Benzene</td>
<td>95-63-6</td>
<td>1 – 5%</td>
</tr>
<tr>
<td>1,3,5-Trimethyl- Benzene</td>
<td>108-67-8</td>
<td>1 – 5%</td>
</tr>
<tr>
<td>N-Propylbenzene</td>
<td>103-65-1</td>
<td>1 – 5%</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>&lt;3%</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>&lt;3%</td>
</tr>
</tbody>
</table>
The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. First Aid Measures

**Inhalation:** If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen. If breathing has stopped, administer artificial respiration. Get medical attention if you feel unwell, or symptoms appear and persist.

**Skin Contact:** Remove contaminated clothing and launder before reuse. Wash exposed skin with soap and water for several minutes. If skin irritation or redness develops, get medical attention.

**Eye Contact:** Flush eyes with large amounts of water for 15 minutes. If irritation or other symptoms persist, get medical attention.

**Ingestion:** DO NOT induce vomiting. If the victim is fully conscious, have them rinse their mouth with water. Get medical assistance by calling a doctor or poison center. Never give anything by mouth to a person who is unconscious or drowsy.

**Most Important Symptoms:** Eye and skin irritant. Harmful by inhalation. Inhalation of mists or vapors may cause irritation to upper respiratory tract; and central nervous systems effects such as dizziness, drowsiness, headache and nausea. Aspiration hazard – may enter the lungs during swallowing or vomiting and cause serious lung damage, which may be fatal. Ingestion may also cause gastrointestinal effects such as nausea, vomiting and diarrhea and central nervous system effects. May cause damage to blood, thymus, liver, spleen, or bone marrow through prolonged or repeated exposure. Contains toluene which is suspected of damaging fertility or the unborn child. Contains benzene that may cause cancer, and may cause genetic defects. The risk of cancer depends on the level and duration of exposure.

**Indication of Immediate Medical Attention/Special Treatment:** Immediate medical treatment is required for ingestions which may result in an aspiration hazard. Material may enter the lungs during swallowing or vomiting and cause serious lung damage, which may be fatal.

### 5. Firefighting Measures

**Suitable (and Unsuitable) Extinguishing Media:** Use water fog, foam, carbon dioxide or dry chemical. Cool fire exposed containers with water.

**Specific Hazards Arising from the Chemical:** Flammable liquid and vapor. Vapors may accumulate in confined areas and present a fire of explosion hazard. Vapors may be heavier than air and travel along surfaces to remote ignition sources and flash back. Closed containers may rupture if exposed to extreme heat. Burning may produce carbon monoxide, carbon dioxide and oxides of nitrogen.

**Special Fire Fighting Procedures:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.
6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures: Caution – slip hazard. Eliminate all ignition sources and ventilate the area. Ventilate the area with explosion-proof equipment. Wear appropriate protective equipment.

Methods and Materials for Containment and Clean-Up: Stop spill at the source if it is safe to do so. Absorb with an inert material. Collect into a suitable container for disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard.

Environmental Precautions: Prevent entry in storm sewers and waterways. Report spill as required by local and national regulations. Notify the National Response Center if a spill of any amount enters navigable waters, the contiguous zone, or adjoining shorelines.

7. Handling and Storage

Precautions for Safe Handling:

Avoid contact with eyes, skin and clothing. Do not breathe vapors and mists. Wash exposed skin thoroughly with soap and water after use. Keep containers closed when not in use. Do not permit smoking in use or storage areas. Keep out of the reach of children.

Do not cut, drill, grind or weld on or near containers, even empty containers. Empty containers retain product residues can be hazardous. Follow all SDS precautions when handling empty containers.

Refer to OSHA 1910.1028 for additional requirements in the handling of benzene.

Conditions for Safe Storage, Including any Incompatibilities:
Store in a cool, dry, well-ventilated area. Keep container tightly closed. Store locked up. Store away from oxidizing agents and other incompatible materials. Keep away from open flames, sparks, and excessive heat.

8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>EXPOSURE LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerosene (as total hydrocarbon vapor)</td>
<td>200 mg/m³ skin TWA ACGIH TLV</td>
</tr>
<tr>
<td>Petroleum distillates hydro desulfurized light catalytic cracked (As Stoddard solvent)</td>
<td>500 ppm TWA OSHA PEL 100 ppm TWA ACGIH TLV</td>
</tr>
<tr>
<td>Petroleum distillates straight run middle (As Stoddard solvent)</td>
<td>500 ppm TWA OSHA PEL 100 ppm TWA ACGIH TLV</td>
</tr>
<tr>
<td>Petroleum distillates, hydro desulfurized middle (As Stoddard solvent)</td>
<td>500 ppm TWA OSHA PEL 100 ppm TWA ACGIH TLV</td>
</tr>
<tr>
<td>Petroleum distillates light hydrocracked (As Stoddard solvent)</td>
<td>500 ppm TWA OSHA PEL 100 ppm TWA ACGIH TLV</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light aromatic</td>
<td>None Established</td>
</tr>
<tr>
<td>Monoalkylaryl alkoxylate aminated</td>
<td>None Established</td>
</tr>
<tr>
<td>1,2,4- Trimethyl- Benzene</td>
<td>25 ppm TWA ACGIH TLV</td>
</tr>
<tr>
<td>1,3,5- Trimethyl- Benzene</td>
<td>25 ppm TWA ACGIH TLV</td>
</tr>
<tr>
<td>N-Propylbenzene</td>
<td>None Established</td>
</tr>
<tr>
<td>Xylene</td>
<td>100 ppm TWA OSHA PEL 100 ppm TWA 150 ppm STEL ACGIH TLV</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>10 ppm TWA OSHA PEL 10 ppm TWA ACGIH TLV (Skin)</td>
</tr>
</tbody>
</table>
Ventilation: General ventilation should be adequate for all normal use. For operations where the exposure limits may be exceeded, forced ventilation such as local exhaust may be needed to maintain exposures below applicable limits.

Respiratory Protection: None under normal use conditions. For operations where the exposure limits are exceeded, a NIOSH approved respirator with an organic vapor cartridge or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134 and 1910.1028; and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Gloves: Impervious gloves such as neoprene or nitrile are recommended if needed to avoid prolonged or repeated skin contact.

Eye Protection: Safety glasses or goggles are recommended if eye contact is possible.

Other Protective Equipment/Clothing: Appropriate protective clothing as needed to prevent prolonged or repeated skin contact.

9. Physical and Chemical Properties

Appearance and Odor: Clear, colorless to light amber, thin colored liquid with a hydrocarbon odor.

<table>
<thead>
<tr>
<th>Physical State: Liquid</th>
<th>Odor Threshold: Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH: Not applicable</td>
<td>Vapor Pressure: Not determined</td>
</tr>
<tr>
<td>Initial Boiling Point/Range: Not determined</td>
<td>Vapor Density: &gt;1</td>
</tr>
<tr>
<td>Melting/Freezing Point: Not determined</td>
<td>Percent Volatile: 100%</td>
</tr>
<tr>
<td>Solubility In Water: Insoluble</td>
<td>Evaporation Rate: Not determined</td>
</tr>
<tr>
<td>Viscosity: Not determined</td>
<td>VOC Content: Not determined</td>
</tr>
<tr>
<td>Specific Gravity: ~0.87</td>
<td>Autoignition Temp: Not determined</td>
</tr>
<tr>
<td>Coefficient Of Water/Oil Distribution: Not determined</td>
<td>Flame extension: Not applicable</td>
</tr>
<tr>
<td>Flash Point: 100°F (38°C) CC</td>
<td>Flammability (solid, gas): Not applicable</td>
</tr>
<tr>
<td>Flammability Limits:</td>
<td>Decomposition Temperature: Not available</td>
</tr>
<tr>
<td>LEL: 0.6 (kerosene)</td>
<td></td>
</tr>
<tr>
<td>UEL: 4.7 (kerosene)</td>
<td></td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Reactivity: Not normally reactive
Chemical Stability: Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions: None known
Conditions to Avoid: Keep away from excessive heat and open flames.
Incompatible Materials: Strong oxidizing agents and reducing agents
Hazardous Decomposition Products: Burning may produce carbon monoxide, carbon dioxide and oxides of nitrogen.
11. Toxicological Information

Potential Health Effects:

Acute Hazards:

Inhalation: Harmful by inhalation. Inhalation of mists or vapors may cause irritation to upper respiratory tract, and may cause central nervous system effects such as dizziness, drowsiness, headache and nausea.

Skin Contact: Causes skin irritation. Prolonged or repeated contact may cause defatting and drying of the skin and dermatitis.

Eye Contact: Causes eye irritation with redness, tearing and pain.

Ingestion: Aspiration hazard – may enter the lungs during swallowing or vomiting and cause serious lung damage, which may be fatal. Ingestion may also cause gastrointestinal effects such as nausea, vomiting and diarrhea and central nervous system effects with symptoms of drowsiness, headache, dizziness and unconsciousness.

Chronic Effects: Prolonged or repeated overexposure may cause adverse effects on the blood, kidneys, liver, hearing, bone marrow, spleen and heart. Toluene is suspected of damaging fertility or the unborn child. It has been reported that benzene exposure in humans induces genotoxic effects in lymphocytes in vivo.

Carcinogenicity Listing: Benzene is listed by IARC as “Carcinogenic to Humans” Group 1, by NTP as “Known to Be a Human Carcinogen” by OSHA as ‘Carcinogen defined with no further categorization’ and as a “Confirmed Human Carcinogen”, and as a “Confirmed Human Carcinogen”, A1 by ACGIH. Naphthalene, Cumene and Ethylbenzene are classified by IARC as a possible human carcinogen (group 2B). Naphthalene is classified by NTP as a reasonably anticipated human carcinogen. None of the other ingredients of this product are listed as carcinogens by IARC, NTP, or OSHA.

Numerical Measures of Toxicity:

Product Calculated ATE:  
LD50 Oral: >5000 mg/kg  
LD50 Skin: >2000 mg/kg  
LC50 Inhalation: 1.91 mg/L (Aerosol)

Kerosene:  
LD50 Oral Rat: >5000 mg/kg  
LD50 Skin Rabbit: >2000 mg/kg  
LC50 Inhalation Rat: >5.28 mg/L/4 hr.

Petroleum distillates hydro desulfurized light catalytic cracked:  
LD50 Oral Rat: 3200 mg/kg  
LD50 Skin Rabbit: >2000 mg/kg  
LC50 Inhalation Rat: 1.72 mg/L/4 hr.

Petroleum distillates straight run middle:  
LD50 Oral Rat: 5000 mg/kg  
LD50 Skin Rabbit: >2000 mg/kg  
LC50 Inhalation Rat: 1.72 mg/L/4 hr.

Petroleum distillates, hydro desulfurized middle:  
LD50 Oral Rat: 3200 mg/kg  
LD50 Skin Rabbit: >2000 mg/kg  
LC50 Inhalation Rat: 4.6 mg/L/4 hr.
Petroleum distillates light hydrocracked:
  LD50 Oral Rat: 3200 mg/kg  
  LD50 Skin Rabbit: >2000 mg/kg  
  LC50 Inhalation Rat: 4.6 mg/L/4 hr.

Solvent naphtha (petroleum), light aromatic:
  LD50 Oral Rat: 3500 mg/kg  
  LD50 Skin Rabbit: >3160 mg/kg

Monoalkylaryl alkoxylation aminated:
  LD50 Oral Rat: 2100 mg/kg  
  LD50 Skin Rabbit: >3000 mg/kg

1,2,4-Trimethylbenzene:
  LD50 Oral Rat: 3280 mg/kg  
  LD50 Skin Rabbit: >3160 mg/kg  
  LC50 Inhalation Rat: 18 mg/L/4 hr.

1,3,5-Trimethylbenzene:
  LD50 Oral Rat: 6000 mg/kg  
  LD50 Skin Rat: >4000 mg/kg  
  LC50 Inhalation Rat: 24,000 mg/m³/4 hr.

Propylbenzene:
  LD50 Oral Rat: 6040 mg/kg

Xylene:
  LD50 Oral Rat: 4300 mg/kg  
  LD50 Skin Rabbit: >1700 mg/kg  
  LC50 Inhalation Rat: 5000 ppm/4 hr

Naphthalene:
  LD50 Oral Rat: 2200-2600 mg/kg  
  LD50 Skin Rabbit: >2000 mg/kg

Cumene:
  LD50 Oral Rat: 2910 mg/kg  
  LD50 Skin Rabbit: 10578 mg/kg  
  LC50 Inhalation Rat: 8000 ppm/4 hr

Toluene:
  LD50 Oral Rat: 5580 mg/kg  
  LD50 Skin Rabbit: >5000 mg/kg  
  LC50 Inhalation Rat: >20 mg/L/4 hr.

Ethylbenzene:
  LD50 Oral Rat: 3500 mg/kg

Benzene:
  LD50 Oral Rat: >2,000 mg/kg  
  LC50 Inhalation Rat: 43.7 mg/L/4 hr.  
  LD50 Dermal Guinea pig: >8,260 mg/kg

12. Ecological Information

Ecotoxicity: Very toxic to aquatic life with long lasting effects.

Kerosene:
  LC50: Pimephales promelas (fathead minnow) 45 mg/l/96 hr.  
  EL50: Daphnia Magna: 1.4 mg/L/48 hr.

Petroleum distillates hydro desulfurized light catalytic cracked:
  LC50: Brachydanio rerio 7.3 mg/L/96 hr.
Hydro treated middle distillates: LL50: Fish 1.13 mg/L/96 hr.

Petroleum distillates, hydro desulfurized middle:
   LC50 Pimephales promelas (fathead minnow) 35 mg/l/96 hr.
Solvent naphtha (petroleum), light aromatic:
   LC50: Oncorhynchus mykiss 9.22 mg/L/96 hr.
   EC50: Daphnia Magna: 6.14 mg/L/48 hr.
Petroleum distillates light hydro cracked:
   LC50: Brachydanio rerio 7.3 mg/L/96 hr.
   1,2,4-Trimethylbenzene:
   LC50: Oncorhynchus mykiss 9.22 mg/L/96 hr.
   EC50: Daphnia Magna: 6.14 mg/L/48 hr.
   1,3,5-Trimethylbenzene:
   LC50: Carassius auratus 12.52 mg/L/96 hr.
   EC50: Daphnia Magna: 6 mg/L/48 hr.
Xylene:
   LC50: Rainbow Trout 13.5 mg/L/96 hr.
Naphthalene:
   LC50: Oncorhynchus gorbuscha (pink salmon) 1.4 mg/L/96
   LC50: Daphnia magna (Water flea) 2.16 mg/L/48 hr.
Toluene:
   LC50: Oncorhynchus kisutch 5.5 mg/L/96 hr.
Ethylbenzene:
   LC50: Pimephales promelas (fathead minnow) 14.4 mg/l/96 hr.
Cumene:
   LC50: Fathead Minnow 6.32 mg/L/96 hr.
   LC50: Daphnia 3.44 mg/L/48 hr.
Benzene:
   LC50: Oncorhynchus mykiss 5.3 mg/L/96 hr.
   EC50: Daphnia magna 10 mg/L/48 hr.
   EC50: Selenastrum capricornutum (Algae) 100 mg/L/72 hr.

Persistence and Degradability:
Hydro sulfurized Kerosene: 58.6 % in 28 days
Petroleum distillates hydro desulfurized light catalytic cracked: 66.8 % in 28 days
Hydro treated middle distillates: 60 % in 28 days
Petroleum distillates, hydro desulfurized middle: 60 % in 28 days
Petroleum distillates light hydro cracked: 60 % in 28 days
1,3,5-Trimethylbenzene: No biodegradation within 180 hrs.
Propylbenzene: BODs ranging from 21.8 to 43.7%
Xylene: Readily biodegradable
Naphthalene: Reached 2% of its theoretical BOD in 4 weeks
Toluene: Readily biodegradable
Ethylbenzene: After a period of inocula adaptation, ethylbenzene is biodegraded fairly rapidly by sewage or activated sludge inocula.
Cumene: Not readily biodegradable
Benzene: Benzene present at 100 mg/L, reached 40% of its theoretical BOD in 2 weeks using an activated sludge inoculum.

Bio accumulative Potential:
1,3,5-Trimethylbenzene: BCF of 161
Propylbenzene: BCF of 138
Xylene: BCF of 6 – 23.4
Naphthalene: BCF 23 to 146, these BCF values suggest the potential for bio concentration in aquatic organisms is low to high.
Toluene: BCF 90
Ethylbenzene: BCF 15
Cumene: Not likely to bio accumulate in aquatic organisms
Benzene: The potential for bio-concentration in aquatic organisms is low.

Mobility in Soil:
Xylene: Low mobility in soil.
Cumene: Low mobility in soil.
Naphthalene: Is expected to have moderate to low mobility in soil.
Benzene: Expected to have high mobility in soil.

Other Adverse Effects: No data available

13. Disposal Considerations

Dispose of in accordance with all local, state/provincial and federal regulations.

14. Transport Information

DOT Hazardous Materials Description: Not Regulated in non-bulk packagings (119 gallons and smaller).

IMDG Dangerous Goods Description: UN1268, Petroleum Distillates, n.o.s., 3, III, limited quantity, Marine Pollutant

If single or inner container exceeds 5 L / 5 kg, Marine Pollutant provisions apply to IMDG transport as applicable.

15. Regulatory Information

United States:

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA Section 103: This product has an RQ of 1176 lbs based on the RQ for Benzene of 10 lbs. present at 0.85% maximum. Oil spills 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.

SARA Hazard Category (311/312): Classified under OSHA Hazcom 2012 GHS as per Section 2 of this SDS.

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Title III, Section 313 (40 CFR 372):

1,2,4-Trimethylbenzene 5%
Xylene <3%
Naphthalene <3%
Ethyl Benzene <1%
Cumene <1%
Toluene <1%
Benzene <0.85%

Canada:

Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List.

16. Other Information

NFPA Rating (NFPA 704): Health: 2 Fire: 2 Instability: 0
HMIS Rating: Health: 2* Fire: 2 Physical Hazard: 0

*Chronic Health Hazard
REVISION DATE: 01/30/2018

REVISION SUMMARY: New SDS. Formula template.

PREVIOUS REVISION DATE: N/A

DATA SUPPLIED IS FOR USE ONLY IN CONNECTION WITH OCCUPATIONAL SAFETY AND HEALTH