1. IDENTIFICATION OF THE SUBSTANCE / APPLICATION AND THE COMPANY

**Supplier:**
Maxima Racing Oils
9266 Abraham Way
Santee, CA 92071
USA
+1 619 449 5000

**Product Name:** Hi-Test

**Article Number:** 83916

**Applications:** Gasoline Octane Booster

**Emergency Telephone:** In USA: CHEMTREC +1 703 527 3887 (24 hours)
Outside USA: +1 619 449 5000

2. HAZARDS IDENTIFICATION

**GHS Classification**
- Flammable Liquid: Category 2
- Aspiration Toxicity: Category 1
- Skin Irritation: Category 2
- Eye Irritation: Category 2A
- Toxic to Reproduction: Category 2
- Specific Target Organ Toxicity – Single Exposure: Category 3
- Specific Target Organ Toxicity - Repeat Exposure: Category 2

**GHS Pictogram**

- Danger!
- H225: Highly flammable liquid and vapor.
- H304: May be fatal if swallowed and enters airways.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H336: May cause drowsiness or dizziness.
- H373: May cause damage to central nervous system through prolonged or repeated exposure by inhalation.

**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, sparks, open flames, and hot surfaces. No smoking.
- P233 Keep container tightly closed.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe mist, vapors or spray.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves and eye protection.
4. FIRST-AID MEASURES

Inhalation
Immediately remove to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get medical attention.

Skin Contact
Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation or symptoms develop, get medical attention. Launder clothing before re-use.

Eye Contact
Flush eyes with large quantities of water, holding the eyelids apart. Get medical attention if irritation develops or persists.

Ingestion
Aspiration Hazard. Do not induce vomiting. If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. Get immediate medical attention.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>Content %</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>80-100</td>
<td>108-88-3</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>5-10</td>
<td>67-63-0</td>
</tr>
</tbody>
</table>

The specific identity and/or exact percentage has been withheld as a trade secret.
HI-TEST

Most Important Symptoms
Causes eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects such as headache, dizziness, drowsiness, nausea and unconsciousness. Aspiration hazard: Harmful or fatal if swallowed. Prolonged overexposure may cause nervous system damage. Possible developmental hazard. May adversely affect the developing fetus or cause birth defects based on animal data.

Indication of Immediate Medical Attention Needed
Get immediate medical attention if swallowed.

Notes to Physician
Treat appropriately

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media
Use carbon dioxide, alcohol foam or dry chemical. Water may be ineffective but can be used to cool exposed containers and structures and disperse flammable vapors.

Specific Hazards Arising From The Chemical
This product is highly flammable and forms explosive mixtures with air. Vapors are heavier than air and will travel along surfaces to remote ignition sources and flash back. Closed containers may explode if exposed to extreme heat. Combustion may produce carbon oxides.

Special Protective Equipment And Precautions For Fire-Fighters
Firefighters should wear full emergency equipment and a NIOSH approved positive pressure self-contained breathing apparatus. Cool exposed intact containers with water

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Evacuate spill area and keep unprotected personnel away. Remove all sources of ignition. Ventilate area with explosion proof equipment. Wear appropriate protective clothing. See also: "Personal Protection "section 8.

Environmental Hazards
Avoid release into the environment. Report spill as required by local and federal regulations.

Methods/Materials for Cleaning up
Contain and collect using inert absorbent materials and place in appropriate containers for disposal. Use non-sparking tools and equipment. If spill has not ignited, use water spray to disperse the vapors and protect personnel attempting to stop leak. Ensure collected material is handled in accordance with section 13 "Disposal Considerations".

7. HANDLING AND STORAGE

Precautions for Safe Handling:
Avoid contact with the eyes, skin and clothing. Do not breathe vapors or mists. Wear protective clothing and equipment. Use only with adequate
ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep away from heat, sparks, flames and all other sources of ignition. Do not permit smoking in use or storage areas.

**Conditions for Safe Storage**

Store in a cool, dry, well-ventilated area away from heat, direct sunlight and all sources of ignition. Store in accordance with regulations for the storage of flammable liquids. Store away from oxidizers and other incompatible materials. Protect from physical damage.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Limits**

- **Toluene**
  - 200 ppm TWA, 300 ppm Ceiling, 500 ppm (10 minute peak/8 hr shift) OSHA PEL
  - 20 ppm TWA ACGIH TLV

- **Isopropanol**
  - 400 ppm TWA OSHA PEL
  - 200 ppm TWA, 400 STEL ACGIH TLV

**Appropriate Engineering Controls**

Use with adequate local exhaust ventilation to maintain exposures below the occupational exposure limits. Use explosion proof equipment where required.

**Personal Protection**

- **Respiratory Protection:** If the exposure limits are exceeded, a NIOSH approved organic vapor respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

- **Eye Protection:** Chemical safety goggles should be worn where contact is possible.

- **Skin/Body Protection:** Impervious coveralls, apron and boots is required to prevent skin contact and contamination of personal clothing. A safety shower and eye wash should be available in the immediate work area.

- **Hand Protection:** Wear impervious gloves such as Teflon or Viton to prevent skin contact.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Blue</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Solvent odor</td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>0.16 ppm (toluene)</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Freezing Point</strong></td>
<td>-139°F (-95°C)</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>231.1°F (110.6°C)</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>43°F (4°C)</td>
</tr>
</tbody>
</table>
Evaporation Rate: No data available
Flammability (solid, gas): Not applicable
Upper Explosion Limit: 7.1% (toluene)
Lower Explosion Limit: 1.1% (toluene)
Vapor Pressure: 3.8 kPa @ 25°C
Vapor Density (Air=1): 2.8
Relative Density: 0.8636
Solubility: Soluble in acetone, ethanol; insoluble in water
Partition Coefficient: n-octanol/water: No data available
Auto Ignition: No data available
Temperature
Decomposition: No data available
Temperature
Volatile Organic Compounds (VOC): No data available
Viscosity: 0.59 cP @ 20°C

10. STABILITY AND REACTIVITY

Reactivity: Not expected to be reactive.
Chemical Stability: Stable.
Possibility of Hazardous Reactions: None known.
Conditions to Avoid: Keep away from heat, sparks, flames and all other sources of ignition.
Incompatible Materials: Avoid contact with strong oxidizing agents.
Hazardous Decomposition Product: Thermal decomposition may produce carbon oxides.

11. TOXICOLOGICAL INFORMATION

Potential Health Hazards
Eye Contact: Causes irritation with redness, tearing and stinging.
Skin Contact: Causes irritation with redness and drying of the skin. Prolonged contact may cause defatting of the skin and dermatitis.
Inhalation: Inhalation of vapors may cause mucous membrane and respiratory irritation and central nervous system depression with symptoms of headache, dizziness, giddiness, intoxication, nausea, vomiting, disorientation, stupor and unconsciousness.
Ingestion: Ingestion may cause mucous membrane and gastrointestinal irritation and nervous system depression with symptoms of headache, dizziness, nausea, narcosis and unconsciousness. Aspiration into the lungs during ingestion or vomiting may cause serious lung damage which may be fatal.
Chronic Effects of Overexposure: Prolonged occupational overexposure may cause effects on hearing and damage to the nervous system, liver and kidneys. Prolonged intentional abuse may
damage many organ systems including: central and peripheral nervous systems, vision, hearing, liver, kidneys, heart and blood. Such abuse has been associated with brain damage characterized by disturbances in gait, personality changes and loss of memory.

**Sensitization:** None of the components have been found to cause sensitization in animals or humans.

**Mutagenicity:** This product is not expected to cause mutagenic activity.

**Reproductive Toxicity:** Toluene has been shown to cause developmental effects. In a developmental study with mice, maternal toxicity was evident in high-dose groups (392 ppm). No evidence of reproductive toxicity was noted. Pups from low dose group exhibited significant increase in body weights and increased incidence of skeletal abnormalities.

**Carcinogenicity:** None of the components of this product are listed as a carcinogen or suspected carcinogen by IARC, NTP, or OSHA.

**Acute Toxicity:**
Toluene: Oral rat LD50 5580 mg/kg; Inhalation rat LC50 >20 mg/L; Dermal rabbit LD50 > 5000 mg/kg
Isopropanol: Oral rat LD50 5045 mg/kg; Inhalation rat LC50 72.6 mg/L/4hr; Skin rabbit LD50 12800 mg/kg

12. ECOLOGICAL INFORMATION

**Ecotoxicity**
Toluene: 96 hr LC50 Coho salmon 5.5 mg/L (flow through), 40 day NOEC - 1.4 mg/L; 48 hr EC50 Ceriodaphnia dubia 3.78 mg/L; 72 hr EC50 Chlamydomonas angulosa 134 mg/L
Isopropanol: 96 hr LC50 Pimephales promelas 9640 mg/L; 48 hr EC50 Daphnia magna - 13,299 mg/L

**Biodegradation** Toluene and isopropanol are readily biodegradable.

**Bioaccumulation** Toluene has BCF less than 90. This suggests the bioconcentration in aquatic organisms is expected to be low to moderate.

**Mobility in soil** Toluene and isopropanol are highly mobile in soil.

**Other adverse effects:** None known.

13. DISPOSAL CONSIDERATIONS

**Disposal** Dispose in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>UN Number</th>
<th>Proper shipping name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
<th>Environmental Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>UN1294 Toluene</td>
<td>3</td>
<td>PGII</td>
<td></td>
</tr>
</tbody>
</table>
Note: This product can be shipped as a limited quantity if the packaging complies.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form
Special precautions: None known.

15. REGULATORY INFORMATION

CERCLA: This product has a Reportable Quantity (RQ) of 1000 lbs. (based on the RQ for Toluene of 1000 lbs). 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.
EPA SARA 302: This product does not contain chemicals regulated under SARA Section 302.
EPA SARA 311 Hazard Classification: Acute Health, Chronic Health, Fire Hazard
EPA SARA 313: This product contains the following chemicals that are regulated under SARA Title III, section 313:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>80-100%</td>
</tr>
</tbody>
</table>

California Proposition 65: This product contains the following chemicals known to the State of Californi to cause cancer and reproductive toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>80-100%</td>
<td>Developmental</td>
</tr>
</tbody>
</table>

Chemical Inventories
Toxic Substances Control Act: All of the components of this product are listed on the TSCA inventory

16. OTHER INFORMATION

NFPA Rating (NFPA 704): Health: 2 Fire: 3 Instability: 0
HMIS Rating: Health: 2* Fire: 3 Physical Hazard: 0

Date of Revision: October 31, 2017
Date of Previous Revision: May 28, 2015
Revision History:
5/28/15: Initial GHS Release
10/31/17: Section 14 Proper Shipping Name and update emergency telephone #

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with
which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.