Section 1 - Product and Company Identification

Product Name: MUL-TIE-Adhesion Promoter
Product Code: 1031, 1034, 1035, 1039
Manufacturer/Supplier: TRANSTAR AUTOBODY TECHNOLOGIES
2040 Heiserman Dr.
Brighton, MI, 48114, USA

24 Hour Emergency Phone(s):
USA 800-424-9300 (CHEMTREC)
International 001-703-527-3887 (CHEMTREC Int'l)
Business Phone: 810-360-1600
SDS Prepared By: Transtar Autobody Technologies

Section 2 - Hazards Identification

Product Use: For Professional and Industrial Use Only
Not recommended for: Not for sale to the general public

Classification of the substance or mixture

GHS Ratings:

- Flammable liquid: 2
- Skin corrosive: 2
- Eye corrosive: 1
- Skin sensitizer: 1
- Mutagen: 1B
- Carcinogen: 1B
- Reproductive toxin: 1A
- Organ toxin single exposure: 3
- Organ toxin repeated exposure: 2
- Aspiration hazard: 1
- Aquatic toxicity: A2

GHS Hazards:

- H225: Highly flammable liquid and vapor
- H304: May be fatal if swallowed and enters airways
- H315: Causes skin irritation

GHS Precautions:

- P101: If medical advice is needed, have product container or label at hand
- P102: Keep out of reach of children
- P103: Read label before use
- P201: Obtain special instructions before use
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H336 May cause drowsiness or dizziness
H340 May cause genetic defects
H350 May cause cancer
H360 May damage fertility or the unborn child
H373 May cause damage to organs through prolonged or repeated exposure
H401 Toxic to aquatic life

P202 Do not handle until all safety precautions have been read and understood
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking
P233 Keep container tightly closed
P240 Ground and bond container and receiving equipment
P241 Use explosion-proof electrical, ventilating, lighting and motorized equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P260 Do not breathe dust, mist, vapors or spray
P264 Wash contacted skin thoroughly after handling
P271 Use only outdoors or in a well-ventilated area
P272 Contaminated work clothing should not be allowed out of the workplace
P273 Avoid release to the environment
P280 Wear protective gloves, protective clothing, eye protection, face protection and respiratory protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P303+P361+P353 IF ON SKIN (or hair): Immediately take off all contaminated clothing. Wash skin with soap and water.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing
P308+P313 IF exposed or concerned: Get medical advice
P333+P313 If skin irritation or a rash occurs: Get medical advice
P370+P378 In case of fire: Use dry chemical, CO2, foam or water fog to extinguish
P400 Store locked up
P403+P235 Store in a well ventilated place. Keep cool
P501 Dispose of contents and container in accordance with local, regional, national and international regulations.
Hazard

Hazards not otherwise classified (HNOC) or not covered by GHS:
None known

### Section 3 - Composition

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>OSHA Exposure Limits</th>
<th>ACGIH Exposure Limits</th>
<th>Other Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone 67-64-1</td>
<td>20 to 30%</td>
<td>1000 ppm TWA; 2400 mg/m3 TWA</td>
<td>750 ppm STEL 500 ppm TWA</td>
</tr>
<tr>
<td>Xylene 1330-20-7</td>
<td>10 to 20%</td>
<td>100 ppm TWA; 435 mg/m3 TWA</td>
<td>150 ppm STEL 100 ppm TWA</td>
</tr>
<tr>
<td>Toluene 108-88-3</td>
<td>10 to 20%</td>
<td>200 ppm TWA</td>
<td>20 ppm TWA</td>
</tr>
<tr>
<td>Hydrotreated Light Naphtha 64742-49-0</td>
<td>10 to 20%</td>
<td>None Listed</td>
<td>None</td>
</tr>
<tr>
<td>Isopropyl Alcohol 67-63-0</td>
<td>5 to 10%</td>
<td>400 ppm TWA; 980 mg/m3 TWA</td>
<td>400 ppm STEL 200 ppm TWA</td>
</tr>
<tr>
<td>Propylene glycol monomethyl ether acetate 108-65-6</td>
<td>1 to 5%</td>
<td>TWA 200 ppm</td>
<td>TWA 50 ppm</td>
</tr>
<tr>
<td>Butyl Alcohol 71-36-3</td>
<td>1 to 5%</td>
<td>100 ppm TWA; 300 mg/m3 TWA</td>
<td>20 ppm TWA</td>
</tr>
<tr>
<td>Bisphenol A epoxy resin 25068-38-6</td>
<td>3.2 percent</td>
<td>None Listed</td>
<td>None</td>
</tr>
<tr>
<td>Maleic anhydride modified chlorinated polypropylene 68609-36-9</td>
<td>2.2 percent</td>
<td>None Listed</td>
<td>None</td>
</tr>
<tr>
<td>Ethylbenzene 100-41-4</td>
<td>0.1 to 1.0%</td>
<td>100 ppm TWA; 435 mg/m3 TWA</td>
<td>20 ppm TWA</td>
</tr>
<tr>
<td>Chlorobenzene 108-90-7</td>
<td>0.20 percent</td>
<td>75 ppm TWA; 350 mg/m3 TWA</td>
<td>10 ppm TWA</td>
</tr>
</tbody>
</table>

The NIOSH IDLH level is 1,000 ppm. This chemical can be absorbed through the skin, thereby increasing exposure.
Section 4 - First Aid Measures

**INHALATION:** If Inhaled: Remove person to fresh air and keep comfortable for breathing. If breathing difficulty persists, seek medical attention.

**EYE CONTACT:** Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for a minimum of 15 minutes while holding eye lids open. If eye irritation persist: seek medical attention.

**SKIN CONTACT:** Take off all contaminated clothing immediately. Wash exposed area thoroughly with soap and water. Seek medical attention if irritation persists. Do NOT use solvents or thinners to wash off.

**INGESTION:** If swallowed, seek medical attention immediately and have product container or label at hand. DO NOT INDUCE VOMITING unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed:**
Dizziness, breathing difficulty, headaches, & loss of coordination.
Can cause skin sensitization and allergic reaction.

**Indication of any immediate medical attention and special treatment needed.**
Seek professional medical attention for all over-exposures and/or persistent problems.

Section 5 - Fire Fighting Measures

**LEL:** 1.0 %  
**UEL:** 12.8 %

**Extinguishing Media:** Dry Chemical, Foam, CO2 or water fog.

**Unsuitable Extinguishing Media:** High volume water jets

**Unusual Fire and Explosion Hazards:** Vapors can travel to a source of ignition and flash back. Closed containers may explode when exposed to extreme heat or burst when contaminated with water (CO2 gas evolved). Hazards apply to empty containers. Combustion generates toxic fumes.

**Hazardous Combustion Products:** oxides of carbon, oxides of nitrogen, formaldehyde, toxic fume

**Special Firefighting Procedures:** Highly toxic fumes may be generated by thermal decomposition. Water runoff from firefighting can cause environmental damage. Dike and collect water used to fight fire.

**Fire Equipment:** Full fire fighter equipment including SCBA should be worn to avoid skin contact and inhalation of concentrated vapors. Minimize skin exposure.

Section 6 - Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:**
Use personal protective equipment. Avoid breathing vapors and mist. Ensure adequate ventilation. Eliminate all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulation to form explosive concentrations. Vapors can accumulate in low areas.
For personal protection see section 8.

**Environmental precautions:**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and materials for containment and cleaning up:**
Dike spill area and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite,
Section 7 - Handling and Storage

Safe Handling Measures: May cause skin sensitization. Persons with a history of skin sensitization problems should not be work around any process in which this mixture is being used. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Ground and bond container and receiving equipment. Use non-sparking tools and explosion proof equipment when handling this material. Keep away from sources of ignition - No Smoking. Use in cool, well-ventilated areas. Keep containers closed when not in use. Take measures to prevent the build up of electrostatic charge. Follow all SDS and label precautions even after container is emptied because they may retain product residues. For precautions see section 2.

Storage Requirements: Keep container tightly closed. Keep away from heat, sparks, open flames and hot surfaces-No Smoking. Store in a cool, dry and well-ventilated place. Do not reuse container when empty.

Section 8 - Exposure Control and PPE

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>OSHA Exposure Limits</th>
<th>ACGIH Exposure Limits</th>
<th>Other Exposure Limits</th>
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<td>750 ppm STEL 500 ppm TWA</td>
<td>NIOSH: 250 ppm TWA; 590 mg/m3 TWA</td>
</tr>
<tr>
<td>Xylene 1330-20-7</td>
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<td>150 ppm STEL 100 ppm TWA</td>
<td></td>
</tr>
<tr>
<td>Toluene 108-88-3</td>
<td>200 ppm TWA</td>
<td>20 ppm TWA</td>
<td>NIOSH: 100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL</td>
</tr>
<tr>
<td>Hydrotreated Light Naphtha 64742-49-0</td>
<td>TWA 200 ppm</td>
<td>TWA 50ppm</td>
<td></td>
</tr>
<tr>
<td>Isopropyl Alcohol 67-63-0</td>
<td>400 ppm TWA; 980 mg/m3 TWA</td>
<td>400 ppm STEL 200 ppm TWA</td>
<td>NIOSH: 400 ppm TWA; 980 mg/m3 TWA 500 ppm STEL; 1225 mg/m3 STEL</td>
</tr>
<tr>
<td>Propylene glycol monomethyl ether acetate 108-65-6</td>
<td>TWA 200 ppm</td>
<td>TWA 50ppm</td>
<td></td>
</tr>
<tr>
<td>Butyl Alcohol 71-36-3</td>
<td>100 ppm TWA; 300 mg/m3 TWA</td>
<td>20 ppm TWA</td>
<td>NIOSH: 50 ppm Ceiling; 150 mg/m3 Ceiling</td>
</tr>
<tr>
<td>Bisphenol A epoxy resin 25068-38-6</td>
<td>None Listed</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Maleic anhydride modified chlorinated polypropylene 68609-36-9</td>
<td>None Listed</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene 100-41-4</td>
<td>100 ppm TWA; 435 mg/m3 TWA</td>
<td>20 ppm TWA</td>
<td>NIOSH: 100 ppm TWA; 435 mg/m3 TWA 125 ppm STEL; 545 mg/m3 STEL</td>
</tr>
<tr>
<td>Chlorobenzene 108-90-7</td>
<td>75 ppm TWA; 350 mg/m3 TWA</td>
<td>10 ppm TWA</td>
<td>The NIOSH IDLH level is 1,000 ppm. This chemical can be absorbed through the skin, thereby increasing exposure.</td>
</tr>
</tbody>
</table>

Engineering Controls: Ground and bond container and reciving equipment. Use explosion proof electrical, ventilation, lighting and motorized equipment. Use non-sparking tools. Ensure adequate ventilation.
**Ventilation:** General mechanical ventilation or local exhaust should be utilized to keep vapor concentrations below exposure limits (PEL & TLV). Ventilation equipment must be explosion proof.

**Safe Work Practices:** Eye washes and safety showers in the workplace are recommended. Avoid contact with skin and eyes. Avoid breathing vapors. Wash hands thoroughly after using and before eating, drinking or smoking. Employee education and training in the safe use and handling of this product is required under the OSHA Hazard Communication Standard 29CFR1200. Smoking in area where this material is used should be strictly prohibited. Always use protective clothing and equipment. Remove all contaminated clothing and wash thoroughly when finished working. Keep food and drink away from material and from area where material is being used. Spraying of material can cause an oxygen deficient environment. Use proper ventilation to remove vapors, mist and fumes combined with NIOSH approved respirator.

**Respiratory Protection:** When working with this material use a MSHA/NIOSH approved cartridge respirator or suitable respiratory protection to keep airborne mists and vapor concentrations below the PEL & TLV limits. When using in poorly ventilated and confined spaces, use a fresh-air supplying respirator or a self-contained breathing apparatus.

**Eye/face Protection:** Use safety glasses with chemical splash goggles or faceshield.

**Skin Protection:** Use chemical resistant gloves.

**Body Protection:** Impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Contaminated Gear:** Take off contaminated clothing immediately and wash before reuse.

### Section 9 - Physical and Chemical Properties
This mixture typically exhibits the following properties under normal circumstances:

<table>
<thead>
<tr>
<th><strong>Appearance</strong></th>
<th>Clear, Amber</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Odor</strong></td>
<td>Organic Solvent</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Freezing point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>-4 F, -20 C</td>
</tr>
<tr>
<td><strong>Flammability</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>54.3 mmHg</td>
</tr>
<tr>
<td><strong>Density (Lb / Gal)</strong></td>
<td>7.29</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Regulatory Coating VOC g/L</strong></td>
<td>788</td>
</tr>
<tr>
<td><strong>Actual Coating VOC g/L</strong></td>
<td>573</td>
</tr>
<tr>
<td><strong>Weight Percent Volatile</strong></td>
<td>88.29</td>
</tr>
<tr>
<td>% Weight VOC</td>
<td>65.53</td>
</tr>
<tr>
<td>% Wt Exempt VOC</td>
<td>22.76</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Physical State</strong></th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Odor threshold:</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Melting point:</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Boiling range:</strong></td>
<td>56°C</td>
</tr>
<tr>
<td><strong>Evaporation rate:</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Explosive Limits:</strong></td>
<td>1% - 13%</td>
</tr>
<tr>
<td><strong>Vapor Density:</strong></td>
<td>2.9</td>
</tr>
<tr>
<td><strong>Solubility:</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Autoignition temperature:</strong></td>
<td>315°C</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td>No data available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Regulatory Coating VOC</strong></th>
<th>6.58 lb/gal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actual Coating VOC lb/Gal</strong></td>
<td>4.78</td>
</tr>
<tr>
<td><strong>Specific Gravity (SG)</strong></td>
<td>0.874</td>
</tr>
<tr>
<td>% Weight Water</td>
<td>0.0</td>
</tr>
<tr>
<td>% Vol Exempt VOC</td>
<td>27.36</td>
</tr>
</tbody>
</table>

### Section 10 - Stability and Reactivity
**Reactivity:** No data available

**Stability:** Stable under recommended storage conditions.
Possibility of hazardous reactions: Vapors may form explosive mixture with air. Hazardous polymerization will not occur.

Conditions to avoid: Heat, flame and sparks. Extreme temperature and direct sunlight.

Incompatible with:
- Strong oxidizing agents
- Acids

Hazardous products produced under decomposition:
- Carbon Monoxide, Carbon Dioxide

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### Section 11 - Toxicological Information

#### Mixture Toxicity
- **Oral Toxicity:** 3,842mg/kg
- **Inhalation Toxicity:** 23mg/L

#### Component Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>3,500 (Rat)</td>
<td>4,350 (Rabbit)</td>
<td>29 (Rat)</td>
</tr>
<tr>
<td>Toluene</td>
<td>2,600 (Rat)</td>
<td></td>
<td>13 (Rat)</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>1,870 (Rat)</td>
<td>4,059 (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>Propylene glycol monomethyl ether acetate</td>
<td></td>
<td>5 (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>Butyl Alcohol</td>
<td>700 (Rat)</td>
<td>3,402 (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>3,500 (Rat)</td>
<td></td>
<td>17 (Rat)</td>
</tr>
</tbody>
</table>

This mixture has not been tested for toxicological effects.

#### Acute Effects:
- **INHALATION** - Dizziness, breathing difficulty, headaches, & loss of coordination.
- **EYE CONTACT** - Moderate irritation, tearing, redness, and blurred vision.
- **SKIN CONTACT** - Moderate irritant. Can dry and defat skin causing cracks, irritation, and dermatitis.
- **INGESTION** - Can cause gastrointestinal irritation, vomiting, nausea, & diarrhea.

#### Chronic Effects:
May affect liver, kidney and central nervous system with repeated exposure. Prolonged or repeated exposure may cause lung injury. May cause skin sensitization and allergic reaction.

#### Routes of Entry
- **Inhalation**
- **Skin Contact**
- **Eye Contact**
- **Ingestion**

#### Target Organs
- Blood
- Eyes
- Kidneys
- Liver
- Lungs
- Central Nervous System
- Reproductive System
- Skin
- Respiratory System
- Other

#### Effects of Overexposure
Short Term Exposure

The liquid can irritate and burn the skin. The vapor can irritate the eyes, nose and throat. Chlorobenzene can affect you when breathed in and by passing through your skin. Exposure to high concentrations can cause you to become dizzy, lightheaded, and to pass out. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. The effects may be delayed. Medical observation is indicated. Ethyl benzene irritates the eyes, skin, and respiratory tract. Exposure to high concentrations can cause dizziness, lightheadedness and unconsciousness. Very high exposures (above the OEL) can cause difficult breathing, narcosis, coma, and even death. Swallowing the liquid may cause aspiration into the lungs, resulting in chemical pneumonitis. May affect the central nervous system. Concentration of 200 ppm can cause irritation. Inhalation: Exposure to vapor can be irritation to the nose and throat. Inhalation of vapor at concentrations above 200 ppm or 3 - 5 minutes can lead to xylene intoxication. Symptoms include headache, dizziness, nausea and vomiting. If exposure should continue, central nervous system depression characterized by shallow breathing and weak pulse can occur. Levels of 230 ppm for 15 minutes may cause lightheadedness without loss of equilibrium. Reversible liver and kidney damage in man has followed exposure to sudden high concentrations of vapor. Such high levels may also give rise to lung congestion. Exposure to extremely high concentrations (10,000 ppm or more) of xylene vapors can lead to a strong narcotic effect with symptoms of slurred speech, stupor fatigue, confusion, unconsciousness, coma, and possible death. The vapors of butyl alcohols irritates the eyes and respiratory tract. They can irritate the skin and cause rash or burning feeling on contact. May affect the central nervous system. Exposure to high concentrations could cause headache, nausea, vomiting, and dizziness. Exposure to high levels of the n- isomer may cause unconsciousness and may lead to irregular heartbeat. The oral LD50 value for rats for the various isomers are as follows: (n-) 790 mg/kg; (sec-) 6,480 mg/kg; (iso-) 2,460 mg/kg; (tert-) 3,500 mg/kg. Irritates the eyes and respiratory tract. Causes central nervous system depression. High levels of exposure may cause fatigue, weakness, confusion, euphoria, dizziness, headache; dilated pupils, lacrimation (discharge of tears); nervousness, muscle fatigue, insomnia; paresthesia; cardiac dysrhythmia, unconsciousness and death may occur. Inhalation: 100 ppm exposure can cause dizziness, drowsiness and hallucinations. 100 - 200 ppm can cause depression, 200 - 500 ppm can cause headaches, nausea, loss of appetite, loss of energy, loss of coordination and coma. In addition to the above, death has resulted from exposure to 10,000 ppm for an unknown time. Skin: Can cause dryness and irritation. Absorption may cause or increase the severity of symptoms listed above. Eyes: Can cause irritation at 300 ppm. Ingestion: Can cause a burning sensation in the mouth and stomach, upper abdominal pain, cough, hoarseness, headache, nausea, loss of appetite, loss of energy, loss of coordination and coma. Contact can irritate the skin. Exposure can irritate the eyes and respiratory tract. Exposure to high concentrations can cause dizziness, lightheadedness, and unconsciousness.
Long Term Exposure  May cause damage to the lungs, blood, nervous system, liver, and kidneys. Repeated exposure to the liquid may cause skin burns. Similar petroleum-based solvents cause brain damage, with reduced memory and concentration, personality changes, fatigue, sleep disturbances, reduced coordination. Repeated or prolonged exposure to the skin may cause drying, scaling and blistering. May cause kidney disease, liver disease, chronic respiratory disease, skin disease, as follows: EB is not nephrotoxic. Concern is expressed because the kidney is the primary route of excretion of EB and its metabolites. EB is not hepatotoxic. Since EB is metabolized by the liver, concern is expressed for these tissues. Exacerbation of pulmonary pathology might occur following exposure to EB. Individuals with impaired pulmonary function might be at risk. EB is a defating agent and may cause dermatitis following prolonged exposure. Individuals with preexisting skin problems may be more sensitive to EB. There is limited evidence that EB may damage the developing fetus, and may cause mutations. Inhalation of xylene vapor and skin contact with liquid are the two most probable routes of long term exposure. Symptoms of inhalation are dizziness, headache and nausea. Long term exposure has been associated with liver and kidney damage, intestinal tract disturbances and central nervous system depression. Prolonged contact with skin can lead to irritation, dryness and cracking. Repeated exposure can cause poor memory, difficulty in concentration, and other brain effects. It can also cause damage to the eye surface. Repeated or prolonged contact with skin may cause dermatitis, drying and cracking of the skin. Exposure to the n- isomer can damage the liver, heart, and kidneys, cause hearing loss and affect sense of balance. Repeated or prolonged contact with skin may cause dermatitis; drying, cracking, itching, and skin rash. May cause liver, kidney, and brain damage; decreased learning ability, psychological disorders. Levels below 200 ppm may produce headache, tiredness and nausea. From 200 - 750 ppm symptoms may include insomnia, irritability, dizziness, some loss of memory, cause heart palpitations and loss of coordination. Blood effects and anemia have been reported but are probably due to contamination by benzene. Repeated skin exposure can cause dryness and skin cracking. This chemical has not been adequately evaluated to determine whether brain or nerve damage could occur with repeated exposure. However, many solvents and other petroleum-based chemicals have been shown to cause such damage. Effects may include reduced memory and concentration, personality changes (withdrawal, irritability), and fatigue, sleep disturbances, reduced coordination, and/or effects on the nerves to the arms and legs (weakness, “pins and needles”).

The following chemicals comprise of at least 0.1% of this mixture and are listed and/or classified as carcinogens or potential carcinogens by the NTP, IARC, OSHA (mandatory listing) or ACGIH (optional listing).

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Description</th>
<th>% Weight</th>
<th>Carcinogen Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-41-4</td>
<td>Ethylbenzene</td>
<td>0.1 to 1.0%</td>
<td>Ethylbenzene: IARC: Possible human carcinogen OSHA: listed</td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Hydrotreated Light Naphtha</td>
<td>10 to 20%</td>
<td>Hydrotreated Light Naphtha: EU REACH: Present (P)</td>
</tr>
</tbody>
</table>

Section 12 - Ecological Information

This material has not been tested for ecological effects.

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Other adverse effects: Contains photochemically reactive solvent.
Component Ecotoxicity

**Acetone**

96 Hr LC50 Oncorhynchus mykiss: 4.74 - 6.33 mL/L; 96 Hr LC50 Pimephales promelas: 6210 - 8120 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 8300 mg/L
48 Hr EC50 Daphnia magna: 10294 - 17704 mg/L [Static]; 48 Hr EC50 Daphnia magna: 12600 - 12700 mg/L

**Xylene**

96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 - 40.75 mg/L [static]
48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

**Toluene**

96 Hr LC50 Pimephales promelas: 15.22 - 19.05 mg/L [flow-through] (1 day old); 96 Hr LC50 Pimephales promelas: 12.6 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 5.89 - 7.81 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 14.1 - 17.16 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 5.8 mg/L [semi-static]; 96 Hr LC50 Lepomis macrochirus: 11.0 - 15.0 mg/L [static]; 96 Hr LC50 Oryzias latipes: 54 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 28.2 mg/L [semi-static]; 96 Hr LC50 Poecilia reticulata: 50.87 - 70.34 mg/L [static]
48 Hr EC50 Daphnia magna: 5.46 - 9.83 mg/L [Static]; 48 Hr EC50 Daphnia magna: 11.5 mg/L
96 Hr EC50 Pseudokirchneriella subcapitata: >433 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 12.5 mg/L [static]

**Isopropyl Alcohol**

96 Hr LC50 Pimephales promelas: 9640 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 11130 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: >1400000 µg/L
48 Hr EC50 Daphnia magna: 13299 mg/L
96 Hr EC50 Desmodesmus subspicatus: >1000 mg/L; 72 Hr EC50 Desmodesmus subspicatus: >1000 mg/L

**Propylene glycol monomethyl ether acetate**

96 Hr LC50 Pimephales promelas: 161 mg/L [static]
48 Hr EC50 Daphnia magna: >500 mg/L

**Butyl Alcohol**

96 Hr LC50 Pimephales promelas: 1730 - 1910 mg/L [static]; 96 Hr LC50 Pimephales promelas: 1740 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 100000 - 500000 µg/L [static]; 96 Hr LC50 Pimephales promelas: 1910000 µg/L [static]
48 Hr EC50 Daphnia magna: 1983 mg/L; 48 Hr EC50 Daphnia magna: 1897 - 2072 mg/L [Static]
96 Hr EC50 Desmodesmus subspicatus: >500 mg/L; 72 Hr EC50 Desmodesmus subspicatus: >500 mg/L

**Ethylbenzene**

96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static]
48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L
72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: >438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static]
Chlorobenzene
96 Hr LC50 Pimephales promelas: 7 - 8.5 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 4.5 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 6.9 - 7.9 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 4.1 - 4.9 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.1 - 5.3 mg/L [flow-through]; 96 Hr LC50 Brachydanio rerio: 91 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 36.35 - 58.19 mg/L [static]
48 Hr EC50 Daphnia magna: 0.59 mg/L
96 Hr EC50 Pseudokirchneriella subcapitata: 2.55 - 420 mg/L; 96 Hr EC50 Poecilia reticulata: 12.5 mg/L [static]

Section 13 - Disposal Considerations

Product should be disposed of in accordance with all Federal, State and local regulations. Contact a licensed professional waste disposal service to dispose of this material. Subject to hazardous waste generation, treatment, storage and disposal rules under RCRA, 40CFR261.

Section 14 - Transportation Information

The following transportation information is provided based on Transtar Autobody Technologies interpretation of shipping regulations. Each shipper is responsible for identifying, naming, marking and labeling prior to offering for transport.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
<th>Packing Group</th>
<th>Hazard Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA</td>
<td>Paint Related Material</td>
<td>UN1263</td>
<td>II</td>
<td>3</td>
</tr>
<tr>
<td>IMDG</td>
<td>Paint Related Material</td>
<td>UN1263</td>
<td>II</td>
<td>3</td>
</tr>
<tr>
<td>USDOT</td>
<td>Paint Related Material</td>
<td>UN1263</td>
<td>II</td>
<td>3</td>
</tr>
</tbody>
</table>

For inner packagings not exceeding 5L each packaged in a strong outer box: Limited Quantity

Section 15 - Regulatory Information

The information listed in this section is not all inclusive of all regulations for this product or the chemical components of this product.

California Hazardous Substance List:
- None

HAPS: This formulation contains the following HAPS:
- 108-90-7 Chlorobenzene 0.2 %
- 100-41-4 Ethylbenzene 0.1 to 1.0 %
- 108-88-3 Toluene 10 to 20 %
- 1330-20-7 Xylene 10 to 20 %

NJ RTK: The following chemicals are listed under New Jersey RTK
- 108-90-7 Chlorobenzene 0.2 %
- 100-41-4 Ethylbenzene 0.1 to 1.0 %
- 71-36-3 Butyl Alcohol 1 to 5 %
- 67-63-0 Isopropyl Alcohol 5 to 10 %
- 108-88-3 Toluene 10 to 20 %
- 1330-20-7 Xylene 10 to 20 %
- 67-64-1 Acetone 20 to 30 %

California Proposition 65
WARNING: This product contains the following chemical(s) known to the State of California to cause birth defects or other reproductive harm.
- 108-88-3 Toluene 10 to 20 %
California Proposition 65
WARNING: This product contains the following chemical(s) known to the State of California to cause cancer:

100-41-4 Ethylbenzene 0.1 to 1.0 %

PA RTK: The following chemicals are listed under Pennsylvania RTK:
108-90-7 Chlorobenzene 0.2 %
100-41-4 Ethylbenzene 0.1 to 1.0 %
71-36-3 Butyl Alcohol 1 to 5 %
67-63-0 Isopropyl Alcohol 5 to 10 %
108-88-3 Toluene 10 to 20 %
1330-20-7 Xylene 10 to 20 %
67-64-1 Acetone 20 to 30 %

EU REACH SIN: The chemicals listed below are on the EU REACH SIN list
- None

SARA 312: This Product contains the following chemicals subject to the reporting requirements of SARA 312:
100-41-4 Ethylbenzene 0.1 to 1.0 %
71-36-3 Butyl Alcohol 1 to 5 %
108-88-3 Toluene 10 to 20 %

SARA 313: This Product contains the following chemicals subject to the reporting requirements of SARA 313:
100-41-4 Ethylbenzene 0.1 to 1.0 %
108-88-3 Toluene 10 to 20 %

WHMIS:
108-90-7 Chlorobenzene 0.2 %
100-41-4 Ethylbenzene 0.1 to 1.0 %
71-36-3 Butyl Alcohol 1 to 5 %
67-63-0 Isopropyl Alcohol 5 to 10 %
108-88-3 Toluene 10 to 20 %
67-64-1 Acetone 20 to 30 %

TSCA: The following are not listed under TSCA:
- None

SARA: The following are reportable under SARA
108-90-7 Chlorobenzene 0.20%
100-41-4 Ethylbenzene 0.1 - 1.0%
1330-20-7 Xylene 10 - 20%
71-36-3 Butyl Alcohol 1.0 - 5%
108-88-3 Toluene 10 - 20%
Acrylic Polymer, Proprietary (non hazardous) 5 - 10%
67-63-0 Isopropyl Alcohol 5 - 10%

Section 16 - Other Information

Note: HMIS Ratings involve data and interpretations that can vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.
Date Prepared: 2/13/2015

To the best of our knowledge, the information contained herein is accurate, obtained from sources believed by Transtar Autobody Technologies to be accurate. As with all chemicals, KEEP AWAY FROM CHILDREN AND ANIMALS. FOR PROFESSIONAL AND INDUSTRIAL USE ONLY. The hazard information contained herein is offered solely for the consideration of the user, subject to his own investigation and verification of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.