

# SAFETY DATA SHEET

## Section 1 - Chemical Product and Company Information

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

Product Code: 1033

**CHEMTREC 24 Hour Emergency Phone(s):**  
 USA & Canada 800-424-9300  
 International +1 703 741-5970

Distributor (if applicable):

Business Phone: 800-824-2843  
 SDS Prepared By: Transtar Autobody Technologies

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

## Section 2 - Hazards Identification

### Classification of the substance or mixture

#### GHS Ratings:

Flammable aerosol	1	Flammable aerosol class 1
Gas under pressure	Compressed gas	Entirely gaseous at -50°C
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Skin sensitizer	1	Skin sensitizer
Mutagen	1B	Known to produce heritable mutations in human germ cells Subcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity
Carcinogen	1A	Known Human Carcinogen Based on human evidence
Reproductive toxin	1A	Based on human evidence
Organ toxin single exposure	3	Transient target organ effects- Narcotic effects- Respiratory tract irritation
Organ toxin repeated exposure	2	Presumed to be harmful to human health- Animal studies with significant toxic effects relevant to humans at generally moderate exposure (guidance)- Human evidence in exceptional cases
Aspiration hazard	1	Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity ? 20.5 mm <sup>2</sup> /s at 40° C.
Aquatic toxicity	A3	Acute toxicity <= 10.0 but < 100 mg/l

#### GHS Hazards

H222	Extremely flammable aerosol
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction

#### 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
P202	Do not handle until all safety precautions have been read and understood

H319	Causes serious eye irritation	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking
H335	May cause respiratory irritation	P211	Do not spray on an open flame or other ignition source
H336	May cause drowsiness or dizziness	P251	Pressurized container - Do not pierce or burn, even after use
H340	May cause genetic defects	P260	Do not breathe dust, mist, vapors or spray
H350	May cause cancer	P264	Wash contacted skin thoroughly after handling
H360	May damage fertility or the unborn child	P271	Use only outdoors or in a well-ventilated area
H373	May cause damage to organs through prolonged or repeated exposure	P272	Contaminated work clothing should not be allowed out of the workplace
H402	Harmful to aquatic life	P273	Avoid release to the environment
		P280	Wear protective gloves, protective clothing, eye protection, face protection and respiratory protection.
		P331	Do NOT induce vomiting
		P362	Take off contaminated clothing and wash before reuse
		P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
		P302+P352	IF ON SKIN: Wash 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 cautiously 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
		P337+P313	If eye irritation persists: Get medical attention.
		P405	Store locked up
		P403+P233	Store in a well ventilated place. Keep container tightly closed
		P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
		P501	Dispose of contents and container in accordance with local, regional, national and international regulations.

**Danger**



**Supplemental information:**

DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue

may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY.

Please refer to the SDS for additional information. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.

**Hazards not otherwise classified (HNOC) or not covered by GHS:**

None known

**The following % of the mixture consists of ingredient(s) of unknown acute toxicity.**

0%

<b>Section 3 - Composition</b>
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<b>Chemical Name / CAS No.</b>	<b>OSHA Exposure Limits</b>	<b>ACGIH Exposure Limits</b>	<b>Other Exposure Limits</b>
Propane/Isobutane/N-butane 68476-86-8 20 to 30%	1000 ppm TWA	1000 ppm TWA	
Acetone 67-64-1 10 to 20%	1000 ppm TWA; 2400 mg/m3 TWA	750 ppm STEL 500 ppm TWA	NIOSH: 250 ppm TWA; 590 mg/m3 TWA
Xylene 1330-20-7 10 to 20%	100 ppm TWA; 435 mg/m3 TWA	150 ppm STEL 100 ppm TWA	
Toluene 108-88-3 10 to 20%	200 ppm TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL
Hydrotreated Light Naphtha 64742-49-0 5 to 10%			
Isopropyl Alcohol 67-63-0 5 to 10%	400 ppm TWA; 980 mg/m3 TWA	400 ppm STEL 200 ppm TWA	NIOSH: 400 ppm TWA; 980 mg/m3 TWA 500 ppm STEL; 1225 mg/m3 STEL
Propylene glycol monomethyl ether acetate 108-65-6 1 to 5%	TWA 200 ppm	TWA 50ppm	
Butyl Alcohol 71-36-3 1 to 5%	100 ppm TWA; 300 mg/m3 TWA	20 ppm TWA	NIOSH: 50 ppm Ceiling; 150 mg/m3 Ceiling
Bisphenol A, epichlorohydrin polymer 25068-38-6 1 to 5%			

Maleic anhydride modified chlorinated polypropylene 68609-36-9 1 to 5%	None Listed	None	
Ethylbenzene 100-41-4 0.1 to 1.0%	100 ppm TWA; 435 mg/m3 TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 435 mg/m3 TWA 125 ppm STEL; 545 mg/m3 STEL
Chlorobenzene mono 108-90-7 0.15 percent	75 ppm TWA; 350 mg/m3 TWA	10 ppm TWA	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:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it's suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**EYE CONTACT:** Rinse continuously with plenty of water. 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 persists: seek medical attention.

**SKIN CONTACT:** Wash exposed area thoroughly with soap and water. Take off all contaminated clothing and shoes immediately. Seek medical attention if irritation persists. Wash clothing and shoes before reuse. 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. Wash out mouth

with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms and effects, both acute and delayed:**

**Eye contact:** Causes serious eye irritation.

**Inhalation:** Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact:** Causes skin irritation.

**Ingestion:** Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

**Over-exposure signs/symptoms:**

**Eye contact:** Adverse symptoms may include the following:  
Pain or irritation, watering, redness

**Inhalation:** Adverse symptoms may include the following:  
Respiratory tract irritation, coughing, nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness, reduced fetal weight, increase in fetal deaths, skeletal malformations

**Skin contact:** Adverse symptoms may include the following:

Irritation, redness, reduced fetal weight, increase in fetal deaths, skeletal malformations.

**Ingestion:** Adverse symptoms may include the following:

Nausea or vomiting, reduced fetal weight, increase in fetal deaths, skeletal malformations.

**Indication of any immediate medical attention and special treatment needed.**

Seek professional medical attention for all over-exposures and/or persistent problems.

In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments:** No specific treatment.

**Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

## Section 5 - Fire Fighting Measures

LEL: 1.0 %

UEL: 12.8 %

**Extinguishing Media:** Dry Chemical, Foam, CO2 or water fog. Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable Extinguishing Media:** None known.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

**Hazardous combustible Products:** Carbon monoxide, carbon dioxide, nitrogen oxides, metal oxide(s).

**Special Fire Fighting Procedures:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Runoff to sewer may create fire or explosion hazard. Water runoff from firefighting can cause environmental damage. Dike and collect water used to fight fire.

**Fire Equipment:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6 - Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Eliminate all ignition sources. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Beware of vapors accumulation to form explosive concentrations. Vapors can accumulate in low areas. Put on appropriate personal protective equipment. For personal protection see section 8.

For large spills or transportation accidents involving release of this product, contact the National Response Center: 800-424-9300

**Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Do not let spilled material or runoff enter drains, sewers, waterways or soil. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up:**

**Small Spills:** Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large Spills:** Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

## Section 7 - Handling & Storage

**Safe Handling Measures:** Put on appropriate personal protective equipment (see Section 8). Aerosol cans contain pressurized, flammable propellant. Protect from sunlight, flames and do not expose to temperatures exceeding 50°C. Cans will burst if exposed to extreme heat or temperatures. Do not pierce or burn, even after use. Avoid exposure. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container when empty. Keep aerosol can capped when not in use. Keep spray nozzle pointed away from face and do not direct nozzle spray towards people or animals.

**General Occupational Hygiene:** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Storage Requirements:** Store in accordance with local regulations. Pressurized container: Store away from sunlight and do not expose to temperatures exceeding 50°C. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

## Section 8 - Exposure Controls/Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Propane/Isobutane/N-butane 68476-86-8	1000 ppm TWA	1000 ppm TWA	
Acetone 67-64-1	1000 ppm TWA; 2400 mg/m <sup>3</sup> TWA	750 ppm STEL 500 ppm TWA	NIOSH: 250 ppm TWA; 590 mg/m <sup>3</sup> TWA
Xylene 1330-20-7	100 ppm TWA; 435 mg/m <sup>3</sup> TWA	150 ppm STEL 100 ppm TWA	
Toluene 108-88-3	200 ppm TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 375 mg/m <sup>3</sup> TWA 150 ppm STEL; 560 mg/m <sup>3</sup> STEL
Hydrotreated Light Naphtha 64742-49-0			
Isopropyl Alcohol 67-63-0	400 ppm TWA; 980 mg/m <sup>3</sup> TWA	400 ppm STEL 200 ppm TWA	NIOSH: 400 ppm TWA; 980 mg/m <sup>3</sup> TWA 500 ppm STEL; 1225 mg/m <sup>3</sup> STEL
Propylene glycol monomethyl ether acetate 108-65-6	TWA 200 ppm	TWA 50ppm	

Butyl Alcohol 71-36-3	100 ppm TWA; 300 mg/m3 TWA	20 ppm TWA	NIOSH: 50 ppm Ceiling; 150 mg/m3 Ceiling
Bisphenol A, epichlorohydrin polymer 25068-38-6			
Maleic anhydride modified chlorinated polypropylene 68609-36-9	None Listed	None	
Ethylbenzene 100-41-4	100 ppm TWA; 435 mg/m3 TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 435 mg/m3 TWA 125 ppm STEL; 545 mg/m3 STEL
Chlorobenzene mono 108-90-7	75 ppm TWA; 350 mg/m3 TWA	10 ppm TWA	The NIOSH IDLH level is 1,000 ppm. This chemical can be absorbed through the skin, thereby increasing exposure.

**Engineering Controls:** Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep workers exposure to airborne contaminants below any recommended or statutory limits. The engineering controls need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**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:** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Eye Protection:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin Protection:**

**Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body Protection:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic

protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Contaminated Gear/Hygiene Practices:** Remove all contaminated clothing and wash thoroughly when finished working. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Keep food and drink away from materials and from area where material is being used or stored.

## Section 9 - Physical & Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

<p><b>Appearance</b> Various colors</p> <p><b>Odor</b> Organic solvent</p> <p><b>pH:</b> No data available</p> <p><b>Freezing point:</b> No data available</p> <p><b>Flash point:</b> -69 F,-56 C</p> <p><b>Flammability:</b> No data available</p> <p><b>Vapor Pressure:</b> 54.3 mmHg</p> <p><b>Density (Lb / Gal)</b> 6.40</p> <p><b>Partition coefficient (n- octanol/water):</b> No data available</p> <p><b>Decomposition temperature:</b> No data available</p> <p><b>Regulatory Coating VOC g/L</b> 693</p> <p><b>Actual Coating VOC g/L</b> 568</p> <p><b>Weight Percent Volatile</b> 91.22</p> <p><b>% Weight VOC</b> 74.15</p> <p><b>% Wt Exempt VOC</b> 17.07</p>	<p><b>Physical State</b> Liquid</p> <p><b>Odor threshold:</b> No data available</p> <p><b>Melting point:</b> No data available</p> <p><b>Boiling range:</b> 56°C</p> <p><b>Evaporation rate:</b> No data available</p> <p><b>Explosive Limits:</b> 1% - 13%</p> <p><b>Vapor Density:</b> 2.9</p> <p><b>Solubility:</b> No data available</p> <p><b>Autoignition temperature:</b> 315°C</p> <p><b>Viscosity:</b> No data available</p> <p><b>Regulatory Coating VOC lb/gal</b> 5.78</p> <p><b>Actual Coating VOC lb/Gal</b> 4.74</p> <p><b>Specific Gravity (SG)</b> 0.766</p> <p><b>% Weight Water</b> 0.0</p> <p><b>% Vol Exempt VOC</b> 18.00</p>
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## 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  
alkali/base/caustic solution

**Hazardous products produced under decomposition:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11 - Toxicological Information

**Mixture Toxicity**

Oral Toxicity: 4,569mg/kg



Inhalation Toxicity: 53mg/L

**Component Toxicity**

1330-20-7	Xylene Oral: 3,500 mg/kg (Rat) Dermal: 4,350 mg/kg (Rabbit) Inhalation: 29 mg/L (Rat)
108-88-3	Toluene Oral: 2,600 mg/kg (Rat) Inhalation: 13 mg/L (Rat)
64742-49-0	Hydrotreated Light Naphtha Oral: 5,000 mg/kg (Rat) Dermal: 3,160 mg/kg (Rabbit)
67-63-0	Isopropyl Alcohol Oral: 1,870 mg/kg (Rat) Dermal: 4,059 mg/kg (Rabbit)
108-65-6	Propylene glycol monomethyl ether acetate Dermal: 5 g/kg (Rabbit)
71-36-3	Butyl Alcohol Oral: 700 mg/kg (Rat) Dermal: 3,402 mg/kg (Rabbit)
25068-38-6	Bisphenol A, epichlorohydrin polymer Oral: 5,000 mg/kg (Rat) Dermal: 4,000 mg/kg (Rat)
68609-36-9	Maleic anhydride modified chlorinated polypropylene Oral: 3,200 mg/kg (Rat) Dermal: 1,000 mg/kg (Guinea pig)
100-41-4	Ethylbenzene Oral: 3,500 mg/kg (Rat) Inhalation: 17 mg/L (Rat)

This mixture has not been tested for toxicological effects.

**Acute Effects:**

INHALATION - Dizziness, breathing difficulty, headaches, & loss of coordination. Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

EYE CONTACT - Causes serious eye irritation, tearing, redness, and blurred vision.

SKIN CONTACT - Moderate irritant. Can dry and defat skin causing cracks, irritation, and dermatitis.

INGESTION - Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

**Chronic Effects:**

May affect liver, kidney and central nervous system with repeated exposure. Prolonged or repeated exposure may cause lung injury. May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

**Routes Of Entry:**

Inhalation	Skin Contact	Eye Contact	Ingestion		
<b>Target Organs</b>					
Blood	Kidneys	Liver	Lungs	Central Nervous System	Reproductive System
Eyes	Respiratory System	Other			
Skin					

**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, peronality 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").

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

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
100-41-4	Ethylbenzene	0.1 to 1.0%	Ethylbenzene: IARC: Possible human carcinogen OSHA: listed
108-90-7	Chlorobenzene mono	0.15	Chlorobenzene mono: 9.27.18: Added MIR Value:NL
64742-49-0	Hydrotreated Light Naphtha	5 to 10%	Hydrotreated Light Naphtha: EU REACH: Present (P)

**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 <i>Oncorhynchus mykiss</i> : 4.74 - 6.33 mg/L; 96 Hr LC50 <i>Pimephales promelas</i> : 6210 - 8120 mg/L [static]; 96 Hr LC50 <i>Lepomis macrochirus</i> : 8300 mg/L 48 Hr EC50 <i>Daphnia magna</i> : 10294 - 17704 mg/L [Static]; 48 Hr EC50 <i>Daphnia magna</i> : 12600 - 12700 mg/L
Xylene	96 Hr LC50 <i>Pimephales promelas</i> : 13.4 mg/L [flow-through]; 96 Hr LC50 <i>Oncorhynchus mykiss</i> : 2.661 - 4.093 mg/L [static]; 96 Hr LC50 <i>Oncorhynchus mykiss</i> : 13.5 - 17.3 mg/L; 96 Hr LC50 <i>Lepomis macrochirus</i> : 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 <i>Lepomis macrochirus</i> : 19 mg/L; 96 Hr LC50 <i>Lepomis macrochirus</i> : 7.711 - 9.591 mg/L [static]; 96 Hr LC50 <i>Pimephales promelas</i> : 23.53 - 29.97 mg/L [static]; 96 Hr LC50 <i>Cyprinus carpio</i> : 780 mg/L [semi-static]; 96 Hr LC50 <i>Cyprinus carpio</i> : >780 mg/L; 96 Hr LC50 <i>Poecilia reticulata</i> : 30.26 - 40.75 mg/L [static] 48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 <i>Gammarus lacustris</i> : 0.6 mg/L
Toluene	96 Hr LC50 <i>Pimephales promelas</i> : 15.22 - 19.05 mg/L [flow-through] (1 day old); 96 Hr LC50 <i>Pimephales promelas</i> : 12.6 mg/L [static]; 96 Hr LC50 <i>Oncorhynchus mykiss</i> : 5.89 - 7.81 mg/L [flow-through]; 96 Hr LC50 <i>Oncorhynchus mykiss</i> : 14.1 - 17.16 mg/L [static]; 96 Hr LC50 <i>Oncorhynchus mykiss</i> : 5.8 mg/L [semi-static]; 96 Hr LC50 <i>Lepomis macrochirus</i> : 11.0 - 15.0 mg/L [static]; 96 Hr LC50 <i>Oryzias latipes</i> : 54 mg/L [static]; 96 Hr LC50 <i>Poecilia reticulata</i> : 28.2 mg/L [semi-static]; 96 Hr LC50 <i>Poecilia reticulata</i> : 50.87 - 70.34 mg/L [static] 48 Hr EC50 <i>Daphnia magna</i> : 5.46 - 9.83 mg/L [Static]; 48 Hr EC50 <i>Daphnia magna</i> : 11.5 mg/L 96 Hr EC50 <i>Pseudokirchneriella subcapitata</i> : >433 mg/L; 72 Hr EC50 <i>Pseudokirchneriella subcapitata</i> : 12.5 mg/L [static]
Isopropyl Alcohol	96 Hr LC50 <i>Pimephales promelas</i> : 9640 mg/L [flow-through]; 96 Hr LC50 <i>Pimephales promelas</i> : 11130 mg/L [static]; 96 Hr LC50 <i>Lepomis macrochirus</i> : >1400000 µg/L 48 Hr EC50 <i>Daphnia magna</i> : 13299 mg/L 96 Hr EC50 <i>Desmodesmus subspicatus</i> : >1000 mg/L; 72 Hr EC50 <i>Desmodesmus subspicatus</i> : >1000 mg/L
Propylene glycol monomethyl ether acetate	96 Hr LC50 <i>Pimephales promelas</i> : 161 mg/L [static] 48 Hr EC50 <i>Daphnia magna</i> : >500 mg/L
Butyl Alcohol	96 Hr LC50 <i>Pimephales promelas</i> : 1730 - 1910 mg/L [static]; 96 Hr LC50 <i>Pimephales promelas</i> : 1740 mg/L [flow-through]; 96 Hr LC50 <i>Lepomis macrochirus</i> : 100000 - 500000 µg/L [static]; 96 Hr LC50 <i>Pimephales promelas</i> : 1910000 µg/L [static] 48 Hr EC50 <i>Daphnia magna</i> : 1983 mg/L; 48 Hr EC50 <i>Daphnia magna</i> : 1897 - 2072 mg/L [Static] 96 Hr EC50 <i>Desmodesmus subspicatus</i> : >500 mg/L; 72 Hr EC50 <i>Desmodesmus subspicatus</i> : >500 mg/L
Ethylbenzene	96 Hr LC50 <i>Oncorhynchus mykiss</i> : 11.0 - 18.0 mg/L [static]; 96 Hr LC50 <i>Oncorhynchus mykiss</i> : 4.2 mg/L [semi-static]; 96 Hr LC50 <i>Pimephales promelas</i> : 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 <i>Lepomis macrochirus</i> : 32 mg/L [static]; 96 Hr LC50 <i>Pimephales promelas</i> : 9.1 - 15.6 mg/L [static]; 96 Hr LC50 <i>Poecilia reticulata</i> : 9.6 mg/L [static] 48 Hr EC50 <i>Daphnia magna</i> : 1.8 - 2.4 mg/L 72 Hr EC50 <i>Pseudokirchneriella subcapitata</i> : 4.6 mg/L; 96 Hr EC50 <i>Pseudokirchneriella subcapitata</i> : >438 mg/L; 72 Hr EC50 <i>Pseudokirchneriella subcapitata</i> : 2.6 - 11.3 mg/L [static]; 96 Hr EC50 <i>Pseudokirchneriella subcapitata</i> : 1.7 - 7.6 mg/L [static]

Chlorobenzene mono

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 Pseudokirchneriella subcapitata: 12.5 mg/L [static]

## Section 13 - Disposal Considerations

Dispose of contents and container in accordance with local, regional, national and international regulations. The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of in the sewer. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues.

## 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.

**Special precautions for user:** Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not available.

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
IATA	Aerosols, Flammable	1950		2.1
IMDG	Aerosols, Flammable	1950		2.1
USDOT	Aerosols, Flammable	1950		2.1

For inner packagings not exceeding 5L each packaged in a 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.

**Australia-AICS:** The following chemicals are listed:

- 108-90-7 Chlorobenzene mono 0.1 %
- 100-41-4 Ethylbenzene 0.1 to 1.0 %
- 68609-36-9 Maleic anhydride modified chlorinated polypropylene 1 to 5 %
- 25068-38-6 Bisphenol A, epichlorohydrin polymer 1 to 5 %
- 71-36-3 Butyl Alcohol 1 to 5 %
- 108-65-6 Propylene glycol monomethyl ether acetate 1 to 5 %
- 67-63-0 Isopropyl Alcohol 5 to 10 %
- 64742-49-0 Hydrotreated Light Naphtha 5 to 10 %
- 108-88-3 Toluene 10 to 20 %
- 1330-20-7 Xylene 10 to 20 %
- 67-64-1 Acetone 10 to 20 %
- 68476-86-8 Propane/Isobutane/N-butane 20 to 30 %

**China-SEPA (IECSC):** The following chemicals are listed :

108-90-7 Chlorobenzene mono 0.1 %  
100-41-4 Ethylbenzene 0.1 to 1.0 %  
68609-36-9 Maleic anhydride modified chlorinated polypropylene 1 to 5 %  
25068-38-6 Bisphenol A, epichlorohydrin polymer 1 to 5 %  
71-36-3 Butyl Alcohol 1 to 5 %  
108-65-6 Propylene glycol monomethyl ether acetate 1 to 5 %  
67-63-0 Isopropyl Alcohol 5 to 10 %  
64742-49-0 Hydrotreated Light Naphtha 5 to 10 %  
108-88-3 Toluene 10 to 20 %  
1330-20-7 Xylene 10 to 20 %  
67-64-1 Acetone 10 to 20 %  
68476-86-8 Propane/Isobutane/N-butane 20 to 30 %

**DSL Status:** The following chemicals are listed on the DSL Inventory.

108-90-7 Chlorobenzene mono 0.1 %  
100-41-4 Ethylbenzene 0.1 to 1.0 %  
68609-36-9 Maleic anhydride modified chlorinated polypropylene 1 to 5 %  
25068-38-6 Bisphenol A, epichlorohydrin polymer 1 to 5 %  
71-36-3 Butyl Alcohol 1 to 5 %  
108-65-6 Propylene glycol monomethyl ether acetate 1 to 5 %  
67-63-0 Isopropyl Alcohol 5 to 10 %  
64742-49-0 Hydrotreated Light Naphtha 5 to 10 %  
108-88-3 Toluene 10 to 20 %  
1330-20-7 Xylene 10 to 20 %  
67-64-1 Acetone 10 to 20 %  
68476-86-8 Propane/Isobutane/N-butane 20 to 30 %

**HAPS:** This formulation contains the following HAPS:

108-90-7 Chlorobenzene mono 0.1 %  
100-41-4 Ethylbenzene 0.1 to 1.0 %  
108-88-3 Toluene 10 to 20 %  
1330-20-7 Xylene 10 to 20 %


**NDSL Status**

- None

**NJ RTK:** The following chemicals are listed under New Jersey RTK

108-90-7 Chlorobenzene mono 0.1 %  
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 10 to 20 %


**California Proposition 65**

 **WARNING:** This product can expose you to chemicals including

108-88-3 Toluene 10 to 20 %

, which is[are] known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**California Proposition 65**

 **WARNING:** This product can expose you to chemicals including

100-41-4 Ethylbenzene 0.1 to 1.0 %

which is[are] known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**PA RTK:** The following chemicals are listed under Pennsylvania RTK:

- 108-90-7 Chlorobenzene mono 0.1 %
- 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 10 to 20 %

**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 %

**TSCA:** The following are not listed under TSCA or do not meet the reporting/listing requirements under TSCA:

- None

## 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 SDS must be considered.

### Hazardous Material Information System (HMIS)

HEALTH	3
FLAMMABILITY	4
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

#### HMIS & NFPA Hazard Rating

##### Legend

\* = Chronic Health Hazard

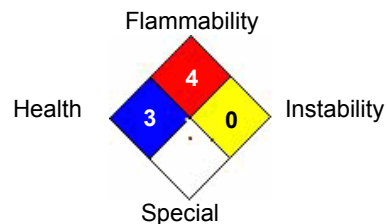
0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH

### National Fire Protection Association (NFPA)



Date Prepared: 8/30/2019

Reviewer Revision

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.

