MATERIAL SAFETY DATA SHEET

Revision 1 Prepared 2011-01-05

Section 1 - Product and Company Identification

Product Name: TRUE FINISH URETHANE CLEARCOAT Product Code: 4900-01, 4900-04

TradeName(s):

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'I)

Business Phone: 810-220-3000

MSDS Prepared By: Transtar Autobody Technologies

Product Use: Clearcoat

Section 2 - Composition

Note: HMIS ratings involve data and interpretations that may 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.





HMIS Rating:

2 - 3 - 0





Routes of Entry

Inhalation **Skin Contact Eye Contact** Ingestion

Target Organs

Reproductive Blood Liver **Nervous System** Eyes **Kidneys** Lungs Skin

System

ACUTE:

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.

Effects of Overexposure, TRUE FINISH URETHANE CLEARCOAT:

Short Term Exposure

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.Irritates the eyes and respiratory tract. Causes central nervous system depression. High levels of exposure may cause fatigue, weakness, confusion, euphoria,

Effects of Overexposure, TRUE FINISH URETHANE CLEARCOAT:

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. The substance irritates the eyes, skin, and respiratory tract. High exposures, above the occupational exposure levels, can cause weakness, headache, and drowsiness and may cause unconsciousness. Contact can irritate the skin. Exposure can irritate the eyes and respiratory tract. Exposure to high concentrations can cause dizziness, lightheadedness, and unconsciousness. The substance irritates the eyes, skin, and nasal passages and upper respiratory system. May cause stomach irritation; light sensitivity. Methyl n-amyl ketone can affect you when breathed in and by passing through your skin. Irritates the eyes and the respiratory tract. May affect the central nervous system. Breathing the vapor can cause dizziness and lightheadedness, and can make you pass out. Methyl isobutyl ketone can affect you when breathed in. Exposure to high concentrations can cause you to feel dizzy and lightheaded and to pass out. Breathing the vapor may cause loss of appetite, nausea, vomiting, and diarrhea. Contact or the vapor can irritate the eyes, nose, mouth, throat. Contact can irritate the skin. Ingestion chemical pneumonitis.

Long Term Exposure

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, 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.n-Butyl acetate may cause skin allergy. n-Butyl acetate has been shown to damage the developing fetus in animals. Prolonged and repeated exposure to butyl acetates can cause defatting, drying and cracking of the skin. Although many solvents and petroleum based products cause lung, brain and nerve damage, these chemicals have not been adequately evaluated to determine these effects. 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"). Unknown at this time. However this chemical may cause lung problems. Di-n-butyl phthalate may also damage the developing fetus and may also damage the testes (male reproductive glands). Causes skin irritation with cracking and drying; destroys the skin's natural oils.

Effects of Overexposure, TRUE FINISH URETHANE CLEARCOAT:

May cause liver and kidney damage. May affect the nervous system.Long-term exposure may damage the liver and kidneys. Repeated or prolonged contact with skin may cause drying and cracking.

Ethylbenzene: IARC: Group 3 carcinogen CAS# 100-41-4:

OSHA: Possible Select carcinogen IARC: Group 2B carcinogen

Section 3 - Hazard Identification				
Chemical Name / CAS No Acrylic polyol, Proprietary 10 to 30% Vapor Pressure: 0	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits	
Acetone 67-64-1 10 to 30% Vapor Pressure: 186	The Federal OSHA standard is 1,000 ppm (2,400 mg/m3), the DFG/MAK value is 500 ppm (1,200 mg/m3), Peak Limitations are 2 × normal MAK (30 minute average value); not to exceed 4 times per shift.	The ACGIH has a TWA of 500 ppm (1,188 mg/m3) and a STEL of 750 ppm (1,782 mg/m3).		
Propylene glycol monomethyl ether acetate 108-65-6 7 to 13% Vapor Pressure: 4 mmHg	TWA 200 ppm Ceiling: 300 ppm MAX CONC: 500 ppm	TWA 50ppm	TWA 50ppm STEL 75ppm	
Xylene 1330-20-7 5 to 10% Vapor Pressure: 8 mm Hg	The OSHA PELTWA, NIOSH TWA, DFG MAK, HSE TWA, and the ACGIH TWA value is 100 ppm (435 mg/m3) for all isomers.	The OSHA PELTWA, NIOSH TWA, DFG MAK, HSE TWA, and the ACGIH TWA value is 100 ppm (435 mg/m3) for all isomers. The NIOSH, ACGIH, and HSE STEL value is 150 ppm (655 mg/m3).	The notation "skin" is added to indicate the possibility of cutaneous absorption. The NIOSH IDLH (all isomers) = 900 ppm.	
Modified styrene acrylic polymer 3 to 7% Vapor Pressure: 0				
Toluene 108-88-3 3 to 7% Vapor Pressure: 22 mm Hg	The OSHA TWA is 200 ppm and a ceiling level of 300 ppm not to be exceeded at any time and a 500 ppm as a 10-minute maximum peak.	ACGIH and DFG recommend a TWA of 50 ppm.	NIOSH and HSE recommend a TWA of 100 ppm (375 mg/m3) and a STEL of 150 ppm (560 mg/m3) not to be exceeded during any 5 minute work period. The NIOSH IDLH level is 500 ppm.	
Methyl Isobutyl Ketone 108-10-1 3 to 7% Vapor Pressure: 20 @25C	The OSHA TWA is 100 ppm (410 mg/m3).	NIOSH and ACGIH recommend a TWA of 50 ppm (205 mg/m3) and STEL of 75 ppm (300 mg/m3).	HSE has set these same values but it adds the notation "skin" indicating the possibility of Cutaneous absorption, Japan and Sweden have	

set the same limits also but Germany has set a MAK of 100 ppm (400 mg/m3). The former USSR set a MAC in workplace air of 5 mg/m3.

			1119/1110.
Amyl propionate 624-54-4 1 to 5% Vapor Pressure: 1.6 25C	OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate protective gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to prevent skin exposure.		
Ethylbenzene 100-41-4 1 to 5% Vapor Pressure: 8 mm Hg	The OSHA PELTWA, NIOSH TWA, DFG MAK, HSE TWA, and the ACGIH TWA value is 100 ppm (435 mg/m3) for all isomers.	The OSHA PELTWA, NIOSH TWA, DFG MAK, HSE TWA, and the ACGIH TWA value is 100 ppm (435 mg/m3) for all isomers. The NIOSH, ACGIH, and HSE STEL value is 150 ppm (655 mg/m3).	The notation "skin" is added to indicate the possibility of cutaneous absorption. The NIOSH IDLH (all isomers) = 900 ppm. Some TWA values from other countries are as follows: former USSR 50 mg/m3 WHO 215 mg/m3 Brazil 340 mg/m3 (78 ppm) Sweden 350 mg/m3 (80 ppm).
n-Butyl Acetate 123-86-4 1 to 5% Vapor Pressure: 11.5 mmHg	The OSHA legal limit and ACGIH value is 3.5 mg/m3 TWA.	The OSHA legal limit and ACGIH value is 3.5 mg/m3 TWA.	
Methyl n-Amyl Ketone 110-43-0 1 to 5% Vapor Pressure: 0		The ACGIH recommends a TWA of 50 ppm (233 mg/m3) as has HSE.	The Federal standard is 100 ppm (465 mg/m3). The NIOSH IDLH level is 800 ppm. Several states have set guidelines or standards for methyl n-amyl ketone in ambient air ranging from 2.35 – 4.65 mg/m3 (North Dakota) to 3.9 mg/m3 (Virginia) to 4.7 mg/m3 (Connecticut) to 5.595 mg/m3 (Nevada).
Dibutyl Phthalate 84-74-2 1 to 5% Vapor Pressure: .00012	The Federal legal limit (OSHA PEL) and ACGIH recommended TWA is 5 mg/m3.	The Federal legal limit (OSHA PEL) and ACGIH recommended TWA is 5 mg/m3.	The NIOSH IDLH level is 9,300 mg/m3.

Section 4 - First Aid Measures

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

INHALATION: Remove person from area to fresh air. If breathing difficulty persists, seek medical attention.

EYE CONTACT: Flush eyes with clean water for a minimum of 15 minutes. Seek medical attention.

SKIN CONTACT: Wash exposed area thoroughly with soap and water.

INGESTION: DO NOT INDUCE VOMITTING. Seek immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: 0 C (32 F)

LEL: 0.5 % UEL: 112.8 %

Extinguishing Media: Foam, Alcohol Foam, CO2, Dry Chemical, Water Fog, Other.

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: Carbon monoxide, carbon dioxide, oxides of nitrogen.

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

Accidental Release Measures: Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Eliminate all sources of ignition, provide adequate ventilation, dike spill area and add absorbment materail to spilled liquid. Sweep up and dispose of in a DOT approved container. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. The container must be labeled and disposed in accordance with State, Federal, or local waste regulations by a licensed waste contractor/hauler. For large spills or transportation accidents involving release of this product, contact the National Response Center: 800-424-9300.

Eliminate all sources of ignition, provide adequate ventilation, dike spill area and add absorbent earth or sawdust to spilled liquid. Sweep up and dispose of in appropriate containers in accordance with Federal, State and/or Local regulations

Section 7 - Handling and Storage

Safe Handling Measures: Use non-sparking tools and explosion proof equipment when handling this material. Avoid hot surfaces. Use in cool, well-ventilated areas. Keep containers closed when not in use. Keep away from excessive heat and open flames. Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

Storage Requirements: Store in a cool area away from heat and flames. Do not reuse container when empty.

Section 8 - Exposure Control and PPE

Engineering Controls: 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.

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 Protection: Use safety glasses with chemical splash goggles or faceshield.

Skin Protection: Use chemical resistant gloves.

Section 9 - Physical and Chemical Properties

Appearance Clear, colorless

Odor Organic solvent

Physical State Liquid

Vapor Density Heavier than air

Vapor Density 3.11

Boiling Range 56 to 340 C

Specific Gravity (SG) 0.934

Lbs VOC/Gal (- H2O & Ex Solv) 4.43

g/L VOC-(H2O & Ex Solv) 530.28

Lbs VOC/Gal 3.36

Section 10 - Stability and Reactivity

Incompatibile with:

Strong oxidizing agents

Acids

Strong oxidizers

Strong bases

Alkali contamination

Strong oxidizing agents, acids, and alkali/base/caustic solutions

Hazardous products produced under decomposition:

Carbon Monoxide, Carbon Dioxide

Carbon monoxide, carbon dioxide, oxides of nitrogen, and cyanide.

Section 11 - Toxicological Information

This material has not been tested for toxicological effects.

Section 12 - Ecological Information

This material has not been tested for ecological effects.

Section 13 - Disposal Considerations

Subject to hazardous waste generation, treatment, storage and disposal. Product should be disposed of in accordance with all governmental regulations. Subject to hazardous waste generation, treatment, storage and disposal under RCRA, 40CFR261. Product should be disposed of in accordance with all Federal, State and local regulations.

U002 U069 U161

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.

Agency Proper Shipping Name UN Number Packing Group HazardClass

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.

- None

DSL Status: The following chemicals are not listed on the DSL Inventory and or are not in compliance with the DSL

67-64-1 Acetone 10 to 30 percent

108-65-6 Propylene glycol monomethyl ether acetate 7 to 13 percent

108-88-3 Toluene 3 to 7 percent

108-10-1 Methyl Isobutyl Ketone 3 to 7 percent

624-54-4 Amyl propionate 1 to 5 percent

100-41-4 Ethylbenzene 1 to 5 percent

110-43-0 Methyl n-Amyl Ketone 1 to 5 percent

84-74-2 Dibutyl Phthalate 1 to 5 percent

EINECS: The following chemicals are not listed on the EINECS Inventory and or are not in compliance with the EINECS

108-88-3 Toluene 3 to 7 percent

108-10-1 Methyl Isobutyl Ketone 3 to 7 percent

HAPS: This formulation contains the following HAPS:

1330-20-7 Xylene 5 to 10 percent

108-88-3 Toluene 3 to 7 percent

108-10-1 Methyl Isobutyl Ketone 3 to 7 percent

100-41-4 Ethylbenzene 1 to 5 percent

84-74-2 Dibutyl Phthalate 1 to 5 percent

80-62-6 Methyl Methacrylate Monomer 0.1 to 1.0 percent

MA RTK: The following chemicals are listed under Massachusetts RTK:

67-64-1 Acetone 10 to 30 percent

108-65-6 Propylene glycol monomethyl ether acetate 7 to 13 percent

1330-20-7 Xylene 5 to 10 percent

108-88-3 Toluene 3 to 7 percent

108-10-1 Methyl Isobutyl Ketone 3 to 7 percent

624-54-4 Amyl propionate 1 to 5 percent

100-41-4 Ethylbenzene 1 to 5 percent

123-86-4 n-Butyl Acetate 1 to 5 percent

110-43-0 Methyl n-Amyl Ketone 1 to 5 percent

84-74-2 Dibutyl Phthalate 1 to 5 percent

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

67-64-1 Acetone 10 to 30 percent

108-65-6 Propylene glycol monomethyl ether acetate 7 to 13 percent

1330-20-7 Xylene 5 to 10 percent

108-88-3 Toluene 3 to 7 percent

108-10-1 Methyl Isobutyl Ketone 3 to 7 percent

624-54-4 Amyl propionate 1 to 5 percent

100-41-4 Ethylbenzene 1 to 5 percent

123-86-4 n-Butyl Acetate 1 to 5 percent

110-43-0 Methyl n-Amyl Ketone 1 to 5 percent

84-74-2 Dibutyl Phthalate 1 to 5 percent

California Proposition 65

WARNING: This product contains chemical(s) known to the State of California to cause birth defects or other reproductive harm.

108-88-3 Toluene 3 to 7 percent

84-74-2 Dibutyl Phthalate 1 to 5 percent

California Proposition 65

WARNING: This product contains chemical(s) known to the State of California to cause cancer.

100-41-4 Ethylbenzene 1 to 5 percent

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

67-64-1 Acetone 10 to 30 percent

108-65-6 Propylene glycol monomethyl ether acetate 7 to 13 percent

1330-20-7 Xylene 5 to 10 percent

108-88-3 Toluene 3 to 7 percent

108-10-1 Methyl Isobutyl Ketone 3 to 7 percent

624-54-4 Amyl propionate 1 to 5 percent

100-41-4 Ethylbenzene 1 to 5 percent

123-86-4 n-Butyl Acetate 1 to 5 percent

110-43-0 Methyl n-Amyl Ketone 1 to 5 percent

84-74-2 Dibutyl Phthalate 1 to 5 percent

The chemicals listed below are on the EU REACH SIN list

84-74-2 1 to 5 percent

RI RTK: The following are listed under Rhode Island RTK:

67-64-1 Acetone 10 to 30 percent

108-65-6 Propylene glycol monomethyl ether acetate 7 to 13 percent

1330-20-7 Xylene 5 to 10 percent

108-88-3 Toluene 3 to 7 percent

108-10-1 Methyl Isobutyl Ketone 3 to 7 percent

624-54-4 Amyl propionate 1 to 5 percent

100-41-4 Ethylbenzene 1 to 5 percent

123-86-4 n-Butyl Acetate 1 to 5 percent

110-43-0 Methyl n-Amyl Ketone 1 to 5 percent

84-74-2 Dibutyl Phthalate 1 to 5 percent

SARA 312 Chemicals:

108-88-3 Toluene 3 to 7 percent

108-10-1 Methyl Isobutyl Ketone 3 to 7 percent

100-41-4 Ethylbenzene 1 to 5 percent

84-74-2 Dibutyl Phthalate 1 to 5 percent

SARA 313: This Product contains the following chemcials subject to the reporting requirements of SARA 313:

108-88-3 Toluene 3 to 7 percent

108-10-1 Methyl Isobutyl Ketone 3 to 7 percent

100-41-4 Ethylbenzene 1 to 5 percent

84-74-2 Dibutyl Phthalate 1 to 5 percent

- None

WHMIS:

67-64-1 Acetone 10 to 30 percent

108-65-6 Propylene glycol monomethyl ether acetate 7 to 13 percent

108-88-3 Toluene 3 to 7 percent

108-10-1 Methyl Isobutyl Ketone 3 to 7 percent

624-54-4 Amyl propionate 1 to 5 percent

100-41-4 Ethylbenzene 1 to 5 percent

110-43-0 Methyl n-Amyl Ketone 1 to 5 percent

84-74-2 Dibutyl Phthalate 1 to 5 percent

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

Modified styrene acrylic polymeß - 7% Acrylic polyol, Proprietary 10 - 30%

The following are reportable under SARA
100-41-4Ethylbenzene1.0 - 5%
1330-20-7 Xylene 5 - 10%
108-88-3Toluene 3 - 7%
84-74-2 Dibutyl Phthalate 1.0 - 5%
108-10-1Methyl Isobutyl Ketone3 - 7%

Section 16 - Other Information

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 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.