

SAFETY DATA SHEET

Section 1 - Product and Company Identification

Product Name: TRI-CUT II Product Code: 5331, 5334, 5335, 5339

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

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 liquid	4	Flash point $\geq 60^{\circ}\text{C}$ (140°F) and $\leq 93^{\circ}\text{C}$ (200°F)
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: $\geq 2.3 < 4.0$ or persistent inflammation
Organ toxin single exposure	3	Transient target organ effects- Narcotic effects- Respiratory tract irritation
Organ toxin repeated exposure	1	Significant toxicity in humans; Reliable, good quality human case studies or epidemiological studies Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure

GHS Hazards

H227	Combustible liquid
H315	Causes skin irritation
H335	May cause respiratory irritation
H372	Causes damage to organs through prolonged or repeated exposure

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
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking
P260	Do not breathe dust, mist, vapors or spray
P264	Wash contacted skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves, protective clothing, eye protection, face protection and respiratory protection.
P314	Get Medical attention if you feel unwell

P362	Take off contaminated clothing and wash before reuse
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
P332+P313	If skin irritation occurs: Get medical advice
P370+P378	In case of fire: Use dry chemical, CO ₂ , foam or water fog to extinguish
P405	Store locked up
P403+P233+P235	Store in a well ventilated place. Keep container tightly closed. Keep Cool.
P501	Dispose of contents and container in accordance with local, regional, national and international regulations.

Danger



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%

Section 3 -Composition

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Aluminum Oxide 1344-28-1 21.4 percent	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	ACGIH recommends a TWA value of 5 mg/m ³ was set for aluminum pyro powders and for aluminum welding fumes.	
Aliphatic Hydrocarbons (Stoddard Type) 8052-41-3 5 to 10%	500 ppm TWA; 2900 mg/m ³ TWA	100 ppm TWA	NIOSH: 350 mg/m ³ TWA 1800 mg/m ³ Ceiling (15 min)
Anhydrous Aluminum Silicate 66402-68-4 1 to 5%	15mg/m ³ (Total dust) TWA 8 hours 5mg/m ³ (Respirable dust) TWA 8 hours	2mg/m ³ (Respirable dust) TWA 8 hours	10mg/m ³ (Total dust) TWA 10 hours
White mineral oil 8042-47-5 1 to 5%	Not Determined	Not Determined	Not Determined
Kerosene 8008-20-6 3.0 percent	No OSHA PEL for kerosene, but OSHA has set an exposure limit of 400 mg/m ³ of petroleum product for an 8-hour workday, 40-hour workweek.	200 mg/m ³ TWA (application restricted to conditions in which there are negligible aerosol exposures, total hydrocarbon vapor)	NIOSH: 100 mg/m ³ TWA

Castor Oil 8001-79-4 2.5 percent			
Glycerin 56-81-5 1 to 5%	15 mg/m ³ TWA (mist, total particulate); 5 mg/m ³ TWA (mist, respirable fraction)	ACGIH classifies glycerin mist as a nuisance particulate with a TLV of 10 mg/m ³ .	

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 persists: 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. Wash contaminated clothing before reuse.

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:

Irritation to digestive tract, irritation to respiratory tract, dizziness, drowsiness, fatigue, breathing difficulty, headaches, diarrhea, vomiting, coughing & loss of coordination.

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: 0.6 %

UEL: 19.0 %

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. Hazards apply to empty containers. Combustion generates toxic fumes.

Hazardous Combustion Products: oxides of carbon, oxides of nitrogen, silicon dioxide, toxic fume

Special Firefighting Procedures: Keep people away. Use water spray to cool fire exposed containers. Fight fire from protected location or safe distance. 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. Stop spill at source. Dike and contain.

For personal protection see section 8.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent product from entering into drains, soil, ditches, low areas, sewers and waterways.

Methods and materials for containment and cleaning up:

Dike spill area and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth. Sweep up and dispose of in appropriate containers in accordance to Federal, State and/or Local regulations. Clean preferably with a detergent; avoid use of solvents.

Large Spills: 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 absorbent material 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.

Section 7 - Handling and Storage

Safe Handling Measures: Avoid contact with skin, eyes and clothing. Avoid inhalation of vapor or mist. Wash thoroughly after handling. Keep away from sources of ignition - No Smoking. Use in cool, well-ventilated areas. Keep containers closed when not in use. 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 (all ignition sources)-No Smoking. Store in a cool, dry and well-ventilated place. Do not reuse container when empty. Store away from incompatible materials.

Section 8 - Exposure Control and PPE

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Aluminum Oxide 1344-28-1	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	ACGIH recommends a TWA value of 5 mg/m ³ was set for aluminum pyro powders and for aluminum welding fumes.	
Aliphatic Hydrocarbons (Stoddard Type) 8052-41-3	500 ppm TWA; 2900 mg/m ³ TWA	100 ppm TWA	NIOSH: 350 mg/m ³ TWA 1800 mg/m ³ Ceiling (15 min)
Anhydrous Aluminum Silicate 66402-68-4	15mg/m ³ (Total dust) TWA 8 hours 5mg/m ³ (Respirable dust) TWA 8 hours	2mg/m ³ (Respirable dust) TWA 8 hours	10mg/m ³ (Total dust) TWA 10 hours
White mineral oil 8042-47-5	Not Determined	Not Determined	Not Determined

Kerosene 8008-20-6	No OSHA PEL for kerosene, but OSHA has set an exposure limit of 400 mg/m3 of petroleum product for an 8-hour workday, 40-hour workweek.	200 mg/m3 TWA (application restricted to conditions in which there are negligible aerosol exposures, total hydrocarbon vapor)	NIOSH: 100 mg/m3 TWA
Castor Oil 8001-79-4			
Glycerin 56-81-5	15 mg/m3 TWA (mist, total particulate); 5 mg/m3 TWA (mist, respirable fraction)	ACGIH classifies glycerin mist as a nuisance particulate with a TLV of 10 mg/m3.	

Engineering Controls: Ensure adequate ventilation. Eye wash/shower stations should be in work area.

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 if vapor concentration is above 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:

<p>Appearance White</p> <p>Odor Organic Solvent</p> <p>pH: No data available</p> <p>Freezing point: No data available</p> <p>Flash point: 199 F, 93 C</p> <p>Flammability: No data available</p> <p>Vapor Pressure: 0.0065 mmHg</p> <p>Density (Lb / Gal) 9.99</p> <p>Partition coefficient (n-octanol/water): No data available</p>	<p>Physical State Liquid</p> <p>Odor threshold: No data available</p> <p>Melting point: No data available</p> <p>Boiling range: 100°C</p> <p>Evaporation rate: No data available</p> <p>Explosive Limits: 1% - 19%</p> <p>Vapor Density: 6.8</p> <p>Solubility: No data available</p> <p>Autoignition temperature: 210°C</p>
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Decomposition temperature: No data available Regulatory Coating VOC g/L 338 Actual Coating VOC g/L 108 Weight Percent Volatile 65.83 % Weight VOC 9.03 % Wt Exempt VOC 0.00	Viscosity: No data available Regulatory Coating VOC 2.82 lb/gal Actual Coating VOC lb/Gal 0.90 Specific Gravity (SG) 1.197 % Weight Water 56.8 % Vol Exempt VOC 0.00
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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 acids, bases, oxidizers.

Hazardous products produced under decomposition:

Carbon Monoxide, Carbon Dioxide

Section 11 - Toxicological Information

Mixture Toxicity

Inhalation Toxicity: 94mg/L

Component Toxicity

- 8052-41-3 Aliphatic Hydrocarbons (Stoddard Type)
 Dermal: 2,000 mg/kg (Rabbit) Inhalation: 21 mg/L (Rat)

- 66402-68-4 Anhydrous Aluminum Silicate
 Oral: 2,000 mg/kg (Rat) Dermal: 2,500 mg/kg (Rabbit)

- 8008-20-6 Kerosene
 Oral: 5,000 mg/kg (Rat) Dermal: 2,000 mg/kg (Rabbit) Inhalation: 5 mg/L (Rat)

- 56-81-5 Glycerin
 Inhalation: 4,655 mg/L (Rat)

This mixture has not been tested for toxicological effects.

Acute Effects:

INHALATION - Irritation to respirator tract, 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.

Routes of Entry

- Inhalation
- Skin Contact
- Eye Contact
- Ingestion

Target Organs**Eyes
System****Kidneys****Liver****Lungs****Central Nervous System****Skin****Respiratory****Effects of Overexposure**

Short Term Exposure

Aluminum dust can cause irritation, and particles can scratch the eyes. Aluminum oxide can irritate the eyes, nose and respiratory tract. Particles of aluminum deposited in the eye may cause necrosis of the cornea. Salts of aluminum may cause dermatoses, eczema, conjunctivitis, and irritation of the mucous membranes of the upper respiratory system by the acid liberated by hydrolysis. The effects on the human body caused by inhalation of aluminum dust and fumes are not known with certainty at this time. Present data suggest that pneumoconiosis might be a possible outcome. In the majority of causes investigated, however, it was found that exposure was not to aluminum dust alone, but to a mixture of aluminum, silica fume, iron dusts, and other materials. Glycerin can be irritating to the eyes, skin, and respiratory tract. When swallowed, it can cause insomnia, nausea, vomiting, diarrhea, fever, hemoglobinuria, convulsions and paralysis. Toxic in high concentrations; it is somewhat dehydrating and irritating to exposed tissues. Symptoms include headache, dizziness, insomnia, nausea, vomiting, diarrhea, fever, elevated blood sugar and diabetic coma; very large doses may cause irritation and dehydration of tissues, hemolysis, renal failure, hemoglobinuria, convulsions, and paralysis. Slightly irritates the skin and respiratory tract. Inhalation: Does not evaporate fast enough to cause health effects except when heated or in enclosed spaces. Headache, tiredness, stupor, dizziness, nausea, coma and death, may occur with increasing exposure. Skin: If not promptly removed, may cause reddening, blisters, itching and an increased risk of infection. Eyes: Irritation may occur. Ingestion: Accidental ingestion of unknown amounts has caused irritation of mouth, throat and stomach, nausea, vomiting, rapid breathing, blue skin coloration, and convulsions. Death may result from as little as 1-fluid ounce. Inhalation into lungs following ingestion may result in bronchitis, chemical pneumonia, accumulation of fluid and blood in lungs, and death. As little as 1/30 oz may be fatal in this way. Inhalation: Causes irritation of the eyes and respiratory tract. Exposure to levels above 2,400 mg/m³ may cause headache, dizziness and nose and throat irritation. More severe exposures may cause nausea and vomiting, a feeling of intoxication, weakness, muscle twitches and in extreme cases convulsions, unconsciousness and death.

Long Term Exposure

There is evidence of an increase in bladder, lung, and other cancers among aluminum smelter workers. The increase appears to be due to polycyclic aromatic compound exposure, not to aluminum compounds. Aluminum salts are toxic to the animal fetus and cause fetal damage. Exposure to fine dust from aluminum or aluminum oxide can cause lung damage, pneumonia, and pulmonary fibrosis, with symptoms of coughing, wheezing and shortness of breath. Very high levels of aluminum may cause brain damage. May cause kidney damage. Repeated or prolonged skin contact may cause defatting, itching, and rash. Absorption through skin is slow but repeated skin contact over many years has caused muscular weakness, anemia, changes in white blood cells, fever and death. Can irritate the lungs; bronchitis may develop. May cause kidney damage. A study on the use of kerosene stoves found an increase in oral cancer in men who used kerosene stoves. Skin tumors were seen in mice when their skin was exposed to jet fuel JP-5 for 60 weeks. Prolonged or repeated contact with liquid may cause defatting of the skin with drying, irritation, and skin ulcers. Exposure to vapor may cause eye, nose and throat irritation, fatigue, headaches, anemia, jaundice, and damage to the liver and bone marrow. In animals: kidney damage. Repeated exposure may cause a rare reaction in some people that destroys blood cells (aplastic anemia). This can be fatal. Many petroleum-based solvents have been shown to cause brain and/or nerve damage. Effects may include reduced memory and concentration, personality changes, fatigue, sleep disturbances, reduced coordination, effects on the autonomic nerves and/or nerves to the limbs.

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).

CAS Number

Description

% Weight

Carcinogen Rating

None

No Data Available

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

White mineral oil

96 Hr LC50 Lepomis macrochirus: >10000 mg/L

Glycerin

96 Hr LC50 Oncorhynchus mykiss: 51 - 57 mL/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 .

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
IATA	Non-Regulated			
IMDG	Non-Regulated			
USDOT	Non-Regulated			

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:

- None

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

56-81-5 Glycerin 1 to 5 %

8008-20-6 Kerosene 3.0 %

8052-41-3 Aliphatic Hydrocarbons (Stoddard Type) 5 to 10 %

1344-28-1 Aluminum Oxide 21.4 %

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.

- None

California Proposition 65

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

- None

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

- 56-81-5 Glycerin 1 to 5 %
- 8008-20-6 Kerosene 3.0 %
- 8052-41-3 Aliphatic Hydrocarbons (Stoddard Type) 5 to 10 %
- 1344-28-1 Aluminum Oxide 21.4 %

SARA 312: This Product contains the following chemicals subject to the reporting requirements of SARA 312:

- None

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

- 1344-28-1 Aluminum Oxide 21.4 %

- 56-81-5 Glycerin
- 8001-79-4 Castor Oil
- 8008-20-6 Kerosene
- 8042-47-5 White mineral oil
- 66402-68-4 Anhydrous Aluminum Silicate
- 8052-41-3 Aliphatic Hydrocarbons (Stoddard Type)
- 1344-28-1 Aluminum Oxide
- 7732-18-5 Water

WHMIS:

- 8001-79-4 Castor Oil 2.5 %
- 8052-41-3 Aliphatic Hydrocarbons (Stoddard Type) 5 to 10 %
- 1344-28-1 Aluminum Oxide 21.4 %

TSCA: The following are not listed under TSCA:

- None

SARA: The following are reportable under SARA

- 66402-68-4 Anhydrous Aluminum Silicate 1.0 - 5%
- 1344-28-1 Aluminum Oxide 21.4%
- 56-81-5 Glycerin 1.0 - 5%
- 1330-20-7 Xylene 0.0 - 0.1%
- 8008-20-6 Kerosene 3.0%

Section 16 - Other Information

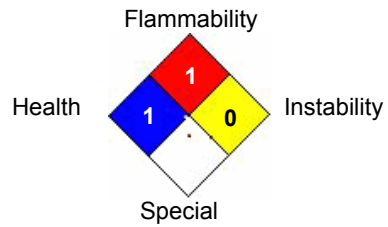
Note: HMIS Ratings involve data and interpretations that can vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Hazardous Material Information System (HMIS)

National Fire Protection Association (NFPA)

HEALTH	<input type="text"/>	1
FLAMMABILITY	<input type="text"/>	1
PHYSICAL HAZARD	<input type="text"/>	0
PERSONAL PROTECTION	<input type="text"/>	

HMIS & NFPA Hazard Rating Legend
 * = Chronic Health Hazard
 0 = INSIGNIFICANT
 1 = SLIGHT
 2 = MODERATE
 3 = HIGH



Date Prepared: 4/14/2015

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.