Section 1 - Product and Company Identification

Product Name: CUTTING COMPOUND Product Code: 5361, 5364

Trade Name: CUTTING COMPOUND

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:

lo Ratings.		
Flammable liquid	4	Flash point >= 60°C (140°F) and <= 93°C (200°F)
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	
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

P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P370+P378	In case of fire: Use dry chemical, CO2, 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.



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 20 to 30%	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	ACGIH recommends a TWA value of 5 mg/m3 was set for aluminum pyro powders and for aluminum welding fumes.				
Aliphatic Hydrocarbons (Stoddard Type) 8052-41-3 1 to 5%	500 ppm TWA; 2900 mg/m3 TWA	100 ppm TWA	NIOSH: 350 mg/m3 TWA 1800 mg/m3 Ceiling (15 min)			
White mineral oil 8042-47-5 1 to 5%	Not Determined	Not Determined	Not Determined			
Decamethylcyclopentasiloxa ne 541-02-6 1 to 5%						
Kerosene 8008-20-6 1 to 5%	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 1 to 5%						

Glycerin	15 mg/m3 TWA (mist, total	ACGIH classifies glycerin
56-81-5	particulate); 5 mg/m3 TWA	mist as a nuisance
1 to 5%	(mist, respirable fraction)	particulate with a TLV of
		10 mg/m3.

Section 4 - First Aid Measures

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

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

SKIN CONTACT: Take off all contaminated clothing immediately. Wash exposed area thoroughly with soap and water. Seek medical attention if irritation presists. 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 pesonnel 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 absorbment 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 throughly 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/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	ACGIH recommends a TWA value of 5 mg/m3 was set for aluminum pyro powders and for aluminum welding fumes.				
Aliphatic Hydrocarbons (Stoddard Type) 8052-41-3	500 ppm TWA; 2900 mg/m3 TWA	100 ppm TWA	NIOSH: 350 mg/m3 TWA 1800 mg/m3 Ceiling (15 min)			
White mineral oil 8042-47-5	Not Determined	Not Determined	Not Determined			
Decamethylcyclopentasiloxa ne 541-02-6						
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	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 and oxygen dificient 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:

Appearance White	Physical State Liquid		
Odor Organic Solvent	Odor threshold: No data available		
pH: No data available	Melting point: No data available		
Freezing point: No data available	Boiling range: 100°C		
Flash point: 199 F,93 C	Evaporation rate: No data available		
Flammability: No data available	Explosive Limits: 1% - 19%		
Vapor Pressure: 0.0037 mmHg	Vapor Density: 7.1		
Density (Lb / Gal) 9.98	Solubility: No data available		
Partition coefficient (n- No data available octanol/water):	Autoignition temperature: 210°C		
Decomposition temperature: No data available	Viscosity: No data available		
Regulatory Coating VOC g/L 389	Regulatory Coating VOC 3.24 Ib/gal		
Actual Coating VOC g/L 133	Actual Coating VOC lb/Gal 1.11		
Weight Percent Volatile 66.15	Specific Gravity (SG) 1.195		

% Weight Water 55.0 % Vol Exempt VOC 0.00

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, halogenated hydrocarbons.

Hazardous products produced under decomposition:

Carbon Monoxide, Carbon Dioxide

Section 11 - Toxicological Information

Mixture Toxicity

Inhalation Toxicity: 109mg/L

Component Toxicity	
8052-41-3	Aliphatic Hydrocarbons (Stoddard Type)
	Dermal: 2,000 mg/kg (Rabbit) Inhalation: 21 mg/L (Rat)
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 Co	ntact	Eye Contact	Ingestion		
Target Organs Eyes System	Kidneys	Liver	Lungs	Central Nervous System	Skin	Respiratory
Effects of Ourse						

Effects of Overexposure

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	<u>% Weight</u>	Carcinogen Rating
None			No Data Available
Section 12 - Eco	logical 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 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.

Agency
IMDGProper Shipping Name
NON-REGULATEDUSDOTNON-REGULATEDIATANON-REGULATED

UN Number Packing Group

Hazard Class

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 1 to 5 % 8052-41-3 Aliphatic Hydrocarbons (Stoddard Type) 1 to 5 % 1344-28-1 Aluminum Oxide 20 to 30 %

California Proposition 65

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

- 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 1 to 5 %
8052-41-3 Aliphatic Hydrocarbons (Stoddard Type) 1 to 5 %
1344-28-1 Aluminum Oxide 20 to 30 %

- EU REACH SIN: The chemicals listed below are on the EU REACH SIN list 9036-19-5 0.1 to 1.0 %
- **SARA 312:** This Product contains the following chemcials subject to the reporting requirements of SARA 312: None
- **SARA 313:** This Product contains the following chemcials subject to the reporting requirements of SARA 313: 1344-28-1 Aluminum Oxide 20 to 30 %

WHMIS:

8001-79-4 Castor Oil 1 to 5 % 8052-41-3 Aliphatic Hydrocarbons (Stoddard Type) 1 to 5 % 1344-28-1 Aluminum Oxide 20 to 30 %

TSCA: The following are not listed under TSCA:

- None

SARA: The following are reportable under SARA

 1344-28-1
 Aluminum Oxide
 20 - 30%

 56-81-5
 Glycerin
 1.0 - 5%

 1330-20-7
 Xylene
 0.0 - 0.1%

 8008-20-6
 Kerosene
 1.0 - 5%

Section 16 - Other Information

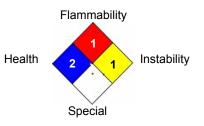
Note: HMIS Ratings involve data and interpretings that can vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Hazardous Material Information System (HMIS)





National Fire Protection Association (NFPA)



Date Prepared: 4/15/2015

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.