

SAFETY DATA SHEET

Section 1 - Product and Company Identification

Product Name: Lightning Activator Product Code: 6854

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: Activator. 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	2	Flash point < 23°C and initial boiling point > 35°C (95°F)
Inhalation Toxicity	Acute Tox. 3	Gases>500+<=2500ppm, Vapors>2+<=10mg/l, Dusts&mists>0.5+<=1mg/l
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Respiratory sensitizer	1	Respiratory sensitizer
Skin sensitizer	1	Skin sensitizer
Carcinogen	1B	Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity
Organ toxin single exposure	3	Transient target organ effects- Narcotic effects- Respiratory tract irritation

GHS Hazards

H225	Highly flammable liquid and vapor
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H331	Toxic if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H336	May cause drowsiness or dizziness
H350	May cause cancer

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
P210	Keep away from heat, sparks, open flames and hot surfaces - No smoking
P233	Keep container tightly closed
P240	Ground and bond container and receiving equipment
P241	Use explosion-proof electrical, ventilating, lighting and motorized equipment
P242	Use only non-sparking tools

P243	Take precautionary measures against static discharge
P261	Avoid breathing dust, mist, vapors and spray
P264	Wash contacted skin thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves, protective clothing, eye protection, face protection and respiratory protection.
P281	Use personal protective equipment as required
P285	In case of inadequate ventilation wear respiratory protection
P311	Call a POISON CENTER or doctor
P321	Specific treatment (see first aid instructions on SDS)
P363	Wash contaminated clothing before reuse
P303+P361+P353	IF ON SKIN (or hair): Immediately take off all contaminated clothing. Wash skin with soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P308+P313	IF exposed or concerned: Get medical advice
P333+P313	If skin irritation or a rash occurs: Get medical advice
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor
P370+P378	In case of fire: Use dry chemical, CO ₂ , foam or water fog to extinguish
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents and container in accordance with local, regional, national and international regulations.

Danger



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

None known

Section 3 -Composition

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Homopolymer of HDI 28182-81-2 30 to 40%	Not Available	Not Available	
Methyl Ethyl Ketone 78-93-3 20 to 30%	200 ppm TWA; 590 mg/m3 TWA	300 ppm STEL 200 ppm TWA	NIOSH: 200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
Homopolymer of IPDI 53880-05-0 10 to 20%	Not Available	Not Available	
n-Butyl Acetate 123-86-4 5 to 10%	150 ppm TWA; 710 mg/m3 TWA	200 ppm STEL 150 ppm TWA	NIOSH: 150 ppm TWA; 710 mg/m3 TWA 200 ppm STEL; 950 mg/m3 STEL
Aromatic petroleum distillates 64742-95-6 5 to 10%	Not Established	Not established	REL-TWA (NIOSH): 350 mg/m3 PEL-TWA(OSHA): 2000 mg/m3
Chlorobenzotrifluoride 98-56-6 5 to 10%	Not Established	Not Established	

Section 4 - First Aid Measures

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

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

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

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

Most important symptoms and effects, both acute and delayed:

Dizziness, breathing difficulty, headaches, & loss of coordination.
Can cause skin and respiratory sensitization and allergic reaction.

Indication of any immediate medical attention and special treatment needed.

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

Section 5 - Fire Fighting Measures

LEL: 0.9 %

UEL: 11.4 %

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

Unsuitable Extinguishing Media: High volume water jets

Unusual Fire and Explosion Hazards: Vapors can travel to a source of ignition and flash back. Closed containers

may explode when exposed to extreme heat or burst when contaminated with water (CO₂ gas evolved). Hazards apply to empty containers. Combustion generates toxic fumes.

Hazardous Combustion Products: 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

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 accumulating to form explosive concentrations. Vapors can accumulate in low areas.

For personal protection see section 8.

Environmental precautions:

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

Methods and materials for containment and cleaning up:

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations. The contaminated area should be cleaned up immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts), concentrated ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts), water (95 parts).

Section 7 - Handling and Storage

Safe Handling Measures: Persons with a history of skin or respiratory sensitization problems should not be employed or around any process in which this mixture is being used. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Ground and bond container and receiving equipment. Use non-sparking tools and explosion proof equipment when handling this material. Keep away from sources of ignition - No Smoking. Use in cool, well-ventilated areas. Keep containers closed when not in use. Take measures to prevent the build up of electrostatic charge. Follow all SDS/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/hot surfaces-No Smoking. Store in a cool, dry and well-ventilated place. Do not reuse container when empty. Store separately from oxidizing agents, strongly alkaline and strongly acidic materials, amines, alcohols and water. Precautions should be taken to avoid exposure to atmospheric humidity or water. Evolution of CO₂ in closed containers causes overpressure and produces a risk of bursting.

Section 8 - Exposure Control and PPE

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Homopolymer of HDI 28182-81-2	Not Available	Not Available	
Methyl Ethyl Ketone 78-93-3	200 ppm TWA; 590 mg/m ³ TWA	300 ppm STEL 200 ppm TWA	NIOSH: 200 ppm TWA; 590 mg/m ³ TWA 300 ppm STEL; 885 mg/m ³ STEL
Homopolymer of IPDI 53880-05-0	Not Available	Not Available	

n-Butyl Acetate 123-86-4	150 ppm TWA; 710 mg/m3 TWA	200 ppm STEL 150 ppm TWA	NIOSH: 150 ppm TWA; 710 mg/m3 TWA 200 ppm STEL; 950 mg/m3 STEL
Aromatic petroleum distillates 64742-95-6	Not Established	Not established	REL-TWA (NIOSH): 350 mg/m3 PEL-TWA(OSHA): 2000 mg/m3
Chlorobenzotrifluoride 98-56-6	Not Established	Not Established	

Engineering Controls: Ground and bond container and reciving equipment. Use explosion-proof electrical, ventilating, lighting and motorized equipment. Use non-sparking tools. Ensure adequate ventilation.

Ventilation: General mechanical ventilation or local exhaust should be utilized to keep vapor concentrations below exposure limits (PEL & TLV). Ventilation equipment must be explosion proof.

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

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

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

Skin Protection: Use chemical resistant gloves.

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

Contaminated Gear: Take off contaminated clothing immediately and have them washed by a industrial laundry service before reuse. Contaminated clothing must not be allowed out of the workplace.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

<p>Appearance Clear</p> <p>Odor Organic solvent</p> <p>pH: No data available</p> <p>Freezing point: No data available</p> <p>Flash point: 16 F,-9 C</p> <p>Flammability: No data available</p> <p>Vapor Pressure: 29.7 mmHg</p> <p>Density (Lb / Gal) 8.39</p> <p>Partition coefficient (n- octanol/water): No data available</p> <p>Decomposition temperature: 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: 80°C</p> <p>Evaporation rate: No data available</p> <p>Explosive Limits: 1% - 11%</p> <p>Vapor Density: 2.9</p> <p>Solubility: No data available</p> <p>Autoignition temperature: 280°C</p> <p>Viscosity: No data available</p>
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Regulatory Coating VOC g/L 437

Regulatory Coating VOC 3.65 lb/gal Actual Coating VOC lb/Gal 3.50 Specific Gravity (SG) 1.005 % Weight Water 0.0 % Vol Exempt VOC 3.92	Actual Coating VOC g/L 420 Weight Percent Volatile 46.98 % Weight VOC 41.78 % Wt Exempt VOC 5.20
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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 may occur.

Conditions to avoid: Heat, flame and sparks. Extreme temperature and direct sunlight. Precautions should be taken to avoid exposure to atmospheric humidity or water. Evolution of CO₂ in closed containers causes overpressure and produces a risk of bursting.

Incompatible with:

Strong acids, strong bases, strong oxidizing agents, and amines. Will react slowly with water and moisture in the air.

Hazardous products produced under decomposition:

Carbon Monoxide, Carbon Dioxide
Oxides of nitrogen, hydrogen cyanide

Section 11 - Toxicological Information

Mixture Toxicity

Oral Toxicity: 4,814mg/kg

Inhalation Toxicity: 10mg/L

Component Toxicity

78-93-3	Methyl Ethyl Ketone Oral: 2,483 mg/kg (Rat) Dermal: 5,000 mg/kg (Rabbit)
123-86-4	n-Butyl Acetate Inhalation: 29 mg/L (Rat)
64742-95-6	Aromatic petroleum distillates Dermal: 2,000 mg/kg (Rabbit) Inhalation: 3,400 ppm (Rat)
98-56-6	Chlorobenzotrifluoride Oral: 13 g/kg (Rat) Dermal: 3 g/kg (Rabbit) Inhalation: 33 mg/L (Rat)

This mixture has not been tested for toxicological effects .

Acute Effects:

INHALATION - Dizziness, breathing difficulty, headaches, & loss of coordination .

EYE CONTACT - Moderate irritation, tearing, redness, and blurred vision .

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

INGESTION - Can cause gastrointestinal irritation, vomiting, nausea, & diarrhea.

Chronic Effects:

May affect liver, kidney and central nervous system with repeated exposure . Prolonged or repeated exposure may cause lung injury.

Contains isocyanates which can cause skin and respiratory sensitization and allergic reaction.

Routes of Entry

Inhalation		Skin Contact		Eye Contact		Ingestion	
Target Organs		Kidneys		Liver		Central Nervous System	
Blood	Eyes	Respiratory System		Other		Skin	

Effects of Overexposure

Short Term Exposure	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. Causes local irritation to skin, eyes and mucous membranes. May cause irritation by any route of exposure. The LD50 rat is 13 gm/kg (13,000 mg/kg) (insignificantly toxic). Irritates the eyes and the respiratory tract. May affect the central nervous system.
Long Term Exposure	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 . There is evidence that this chemical is a mutagen. Repeated exposure can cause drying and cracking of the skin. Has been implicated in certain nervous system and brain disorders characterized by weakness, fatigue, sleep disturbances, reduced coordination, heaviness in chest and numbness of hand and feet. These symptoms may develop after 1 year of exposure to vapor concentrations of 50 - 200 ppm. Improvement is gradual and may take years after exposure is discontinued. Animal tests show that this chemical is a teratogen in animals and possibly causes toxic effects upon human reproduction .

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).

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
None			No Data Available

Section 12 - Ecological Information

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Other adverse effects: Contains photochemically reactive solvent.

This material has not been tested for ecological effects.

Component Ecotoxicity

Methyl Ethyl Ketone	96 Hr LC50 Pimephales promelas: 3130 - 3320 mg/L [flow-through] 48 Hr EC50 Daphnia magna: >520 mg/L; 48 Hr EC50 Daphnia magna: 5091 mg/L; 48 Hr EC50 Daphnia magna: 4025 - 6440 mg/L [Static]
n-Butyl Acetate	96 Hr LC50 Lepomis macrochirus: 100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 17 - 19 mg/L [flow-through] 72 Hr EC50 Desmodesmus subspicatus: 674.7 mg/L
Aromatic petroleum distillates	96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L 48 Hr EC50 Daphnia magna: 6.14 mg/L

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	Paint Related Material	UN1263	II	3
IMDG	Paint Related Material	UN1263	II	3
USDOT	Paint Related Material	UN1263	II	3

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

Section 15 - Regulatory Information

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

California Hazardous Substance List:

- None

HAPS: This formulation contains the following HAPS:

- None

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

123-86-4 n-Butyl Acetate 5 to 10 %

78-93-3 Methyl Ethyl Ketone 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.

4098-71-9 Isophorone Diisocyanate < 1 PPM

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:

123-86-4 n-Butyl Acetate 5 to 10 %

78-93-3 Methyl Ethyl Ketone 20 to 30 %

EU REACH SIN: The chemicals listed below are on the EU REACH SIN list

- None

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

64742-95-6 Aromatic petroleum distillates 5 to 10 %

78-93-3 Methyl Ethyl Ketone 20 to 30 %

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

64742-95-6 Aromatic petroleum distillates 5 to 10 %

78-93-3 Methyl Ethyl Ketone 20 to 30 %

WHMIS:

123-86-4 n-Butyl Acetate 5 to 10 %
78-93-3 Methyl Ethyl Ketone 20 to 30 %



The following are not listed under TSCA:

- None

The following are reportable under SARA:

64742-95-6 Aromatic petroleum distillates 5 - 10%
78-93-3 Methyl Ethyl Ketone 20 - 30%

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)

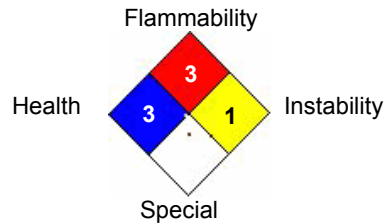
HEALTH	<input type="text"/>	3
FLAMMABILITY	<input type="text"/>	3
PHYSICAL HAZARD	<input type="text"/>	1
PERSONAL PROTECTION	<input type="text"/>	

HMIS & NFPA Hazard Rating

Legend

- * = Chronic Health Hazard
- 0 = INSIGNIFICANT
- 1 = SLIGHT
- 2 = MODERATE
- 3 = HIGH

National Fire Protection Association (NFPA)



Date Prepared: 1/26/2015

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.