

SAFETY DATA SHEET

Section 1 - Chemical Product and Company Information

Product Name: Urethane Clearcoat Hardener Product Code: 5901-04, 5901-07

Manufacturer/Supplier:
TRANSTAR AUTOBODY TECHNOLOGIES
2040 Heiserman Dr.
Brighton, MI, 48114, USA

CHEMTREC 24 Hour Emergency Phone(s):

USA & Canada 800-424-9300
International +1 703 741-5970

Distributor (if applicable):

Business Phone: 800-824-2843

SDS Prepared By: Transtar Autobody Technologies

Product Use: Automotive refinish hardener. 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 | 3 | Flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ (140°F) |
| Inhalation Toxicity | Acute Tox. 4 | Gases >2500 and ≤ 20000 ppm, Vapors >10 and ≤ 20 mg/l, Dusts & mists >1 and ≤ 5 mg/l |
| Skin corrosive | 2 | Reversible adverse effects in dermal tissue, Draize score: ≥ 2.3 < 4.0 or persistent inflammation |
| Eye corrosive | 2A | Eye irritant: Subcategory 2A, Reversible in 21 days |
| Respiratory sensitizer | 1 | Respiratory sensitizer |
| Skin sensitizer | 1 | Skin sensitizer |
| Organ toxin single exposure | 3 | Transient target organ effects- Narcotic effects- Respiratory tract irritation |

GHS Hazards

| | |
|------|---|
| H226 | Flammable liquid and vapor |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| H335 | May cause respiratory irritation |
| H336 | May cause drowsiness or dizziness |

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 |
| 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. |
| P285 | In case of inadequate ventilation wear respiratory protection |
| P312 | Call a POISON CENTER or doctor if you feel unwell |
| 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 |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing |
| P333+P313 | If skin irritation or a rash occurs: Get medical advice |
| P337+P313 | If eye irritation persists: Get medical attention. |
| 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+P233+P231 | 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 |
|-------------------------|----------------------|-----------------------|-----------------------|
|-------------------------|----------------------|-----------------------|-----------------------|

| | | | |
|---|-------------------------------|-----------------------------|---|
| Homopolymer of HDI 28182-81-2 30 to 40% | Not Available | Not Available | |
| n-Butyl Acetate 123-86-4 30 to 40% | 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 |
| Homopolymer of IPDI 53880-05-0 10 to 20% | Not Available | Not Available | |
| Chlorobenzotrifluoride 98-56-6 10 to 20% | Not Established | Not Established | |
| 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 |

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: 10.5 %

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 & 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 Controls/Personal Protection

| Chemical Name / CAS No. | OSHA Exposure Limits | ACGIH Exposure Limits | Other Exposure Limits |
|---|---|-----------------------------|---|
| Homopolymer of HDI 28182-81-2 | Not Available | Not Available | |
| n-Butyl Acetate 123-86-4 | 150 ppm TWA; 710 mg/m ³ TWA | 200 ppm STEL 150 ppm TWA | NIOSH: 150 ppm TWA; 710 mg/m ³ TWA 200 ppm STEL; 950 mg/m ³ STEL |
| Homopolymer of IPDI 53880-05-0 | Not Available | Not Available | |
| Chlorobenzotrifluoride 98-56-6 | Not Established | Not Established | |
| Aromatic petroleum distillates 64742-95-6 | Not Established | Not established | REL-TWA (NIOSH): 350 mg/m ³ PEL-TWA(OSHA): 2000 mg/m ³ |

Engineering Controls: Ground and bond container and receiving 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 & 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: 77 F, 25 C</p> <p>Flammability: No data available</p> <p>Vapor Pressure: 11.1 mmHg</p> <p>Density (Lb / Gal) 8.73</p> <p>Partition coefficient (n-octanol/water): No data available</p> <p>Decomposition temperature: No data available</p> <p>Regulatory Coating VOC g/L 446</p> <p>Actual Coating VOC g/L 407</p> <p>Weight Percent Volatile 49.93</p> <p>% Weight VOC 38.93</p> <p>% Wt Exempt VOC 11.00</p> | <p>Physical State Liquid</p> <p>Odor threshold: No data available</p> <p>Melting point: No data available</p> <p>Boiling range: 98°C</p> <p>Evaporation rate: No data available</p> <p>Explosive Limits: 1% - 11%</p> <p>Vapor Density: 3.6</p> <p>Solubility: No data available</p> <p>Autoignition temperature: 280°C</p> <p>Viscosity: No data available</p> <p>Regulatory Coating VOC 3.72 lb/gal</p> <p>Actual Coating VOC lb/Gal 3.40</p> <p>Specific Gravity (SG) 1.046</p> <p>% Weight Water 0.0</p> <p>% Vol Exempt VOC 8.62</p> |
|--|--|

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

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|---|
| Section 11 - Toxicological Information |
|---|

Mixture Toxicity

Inhalation Toxicity: 12mg/L

Component Toxicity

| | |
|------------|---|
| 123-86-4 | n-Butyl Acetate Inhalation: 29 mg/L (Rat) |
| 98-56-6 | Chlorobenzotrifluoride Oral: 13 g/kg (Rat) Dermal: 3 g/kg (Rabbit) Inhalation: 33 mg/L (Rat) |
| 64742-95-6 | Aromatic petroleum distillates Dermal: 2,000 mg/kg (Rabbit) |

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

| | | | | | | | |
|--------------|------|---------|-------|-------|------------------------|------|-------------|
| Blood System | Eyes | Kidneys | Liver | Lungs | Central Nervous System | Skin | Respiratory |
|--------------|------|---------|-------|-------|------------------------|------|-------------|

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).

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.

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

| | |
|--------------------------------|--|
| 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 |
| Chlorobenzotrifluoride | 48 Hr EC50 Daphnia magna: 3.68 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 | III | 3 |
| IMDG | Paint Related Material | UN1263 | III | 3 |
| USDOT | Paint Related Material | UN1263 | III | 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.

Australia-AICS: The following chemicals are listed:

- 64742-95-6 Aromatic petroleum distillates 5 to 10 %
- 98-56-6 Chlorobenzotrifluoride 10 to 20 %
- 53880-05-0 Homopolymer of IPDI 10 to 20 %
- 123-86-4 n-Butyl Acetate 30 to 40 %
- 28182-81-2 Homopolymer of HDI 30 to 40 %

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

- 64742-95-6 Aromatic petroleum distillates 5 to 10 %
- 98-56-6 Chlorobenzotrifluoride 10 to 20 %
- 53880-05-0 Homopolymer of IPDI 10 to 20 %
- 123-86-4 n-Butyl Acetate 30 to 40 %
- 28182-81-2 Homopolymer of HDI 30 to 40 %

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

- 64742-95-6 Aromatic petroleum distillates 5 to 10 %
- 98-56-6 Chlorobenzotrifluoride 10 to 20 %
- 53880-05-0 Homopolymer of IPDI 10 to 20 %
- 123-86-4 n-Butyl Acetate 30 to 40 %
- 28182-81-2 Homopolymer of HDI 30 to 40 %

HAPS: This formulation contains the following HAPS:

- None

NDSL Status

- None

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

- 123-86-4 n-Butyl Acetate 30 to 40 %

California Proposition 65



WARNING: This product can expose you to chemicals including

- 4098-71-9 Isophorone Diisocyanate < 1 PPM

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

California Proposition 65



WARNING: This product can expose you to chemicals including

- None

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

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

- 123-86-4 n-Butyl Acetate 30 to 40 %

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 %

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 %

The following are not listed under TSCA:

- None

Section 16 - Other Information

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

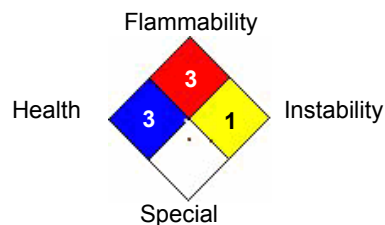
0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH

National Fire Protection Association (NFPA)



Date Prepared: 2/8/2018

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.