

## SAFETY DATA SHEET

### 1. IDENTIFICATION

**PRODUCT NAME:** PALADIN - Polyurethane Hardener Normal

**PRODUCT NUMBER:** 19-241-04

**Manufacture/Supplier:** Transtar Autobody Technologies  
**Address:** 2040 Heiserman Dr., Brighton, Mi. 48114  
**Business Phone:** 800-824-2843

**Distributor (if applicable):**

**Chemtrec 24 Hour  
Emergency Telephone:** USA/Canada: 800-424-9300 (CHEMTREC)  
International: +1-703-741-5970 (CHEMTREC INT'L)

**Recommended Use:** Commercial and Industrial Coating –  
For Professional and Industrial Use Only.  
Not Recommended for sale to the general public.

### 2. HAZARDS IDENTIFICATION

**Classification:**

- **HAZARDOUS SUBSTANCE.** (According to the criteria of OSHA Hazard Communication Standard, 29 CFR 1910.1200)
- **DANGEROUS GOODS.**

CLASSIFICATION	GHS CATEGORY	SIGNAL WORD	HAZARD CODE	HAZARD STATEMENT
Flammable Liquids	3	Warning	H226	Flammable liquid and vapour.
Skin Corrosion/ Irritation	2	Warning	H315	Causes skin irritation.
Sensitisation – Skin	1B	Warning	H317	May cause allergic skin reaction.
Specific Target Organ Toxicity (Single Exposure)	3	Warning	H336	May cause drowsiness and dizziness.
Carcinogenicity	2	Warning	H351	Suspected of causing cancer.

Hazardous To The Aquatic Environment – Long Term Hazard	3	None	H412	Harmful to aquatic life with long lasting effects.
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**Hazard Symbols:**



**Precautionary Statements:**

- Obtain special instructions for use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat/sparks/open flames/ hot surfaces. No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilation/lighting/equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wash hands thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective gloves/protective clothing/eye protection/face protection/respiratory protection.
- IF ON SKIN (or hair): Remove /take off immediately all contaminated clothing. Wash skin with plenty of soap and water.
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- IF exposed or concerned: Get medical advice/attention.
- Specific treatment (see first aid instructions in this SDS).
- If skin irritation or rash occurs: Get medical advice/attention.
- Take off contaminated clothing and wash before reuse.
- In case of fire: Use Foam, Carbon Dioxide or Dry Chemical Powder for extinction.
- Store in a well-ventilated place. Keep tightly closed. Keep cool.
- Store locked up.
- Dispose of contents and container in accordance with local, regional, national and international regulations.

**Hazards Not Otherwise Classified:** No applicable information is available.

**Ingredients with Unknown Acute Toxicity:** No applicable information is available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Entity / Hazardous Component	CAS Numbers	Proportion by wt.
Hexamethylene Diisocyanate Homopolymer	28182-81-2	30 – 60%
p-Chlorobenzotrifluoride	98-56-6	30 – 60%
Methoxy Propyl Acetate	108-65-6	10 – 30%
N-Butyl Acetate	123-86-4	0 - 10%

This product(s) also contains 0 - 1% of other ingredients which are considered non-hazardous in accordance with:

1. 29 CFR Part 1910, subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA).
2. Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment, American Conference of Government Industrial Hygienists (ACGIH).
3. National Toxicology Program (NTP)
4. International Agency for Research on Cancer.

## 4. FIRST AID MEASURES

<b>Route of Exposure:</b>	<b>First Aid Measures and Immediate Medical Treatment</b>	
<b>Ingestion:</b>	Give a glass of water. Do NOT induce vomiting. Place patients head downwards if vomiting occurs. Prevent it entering lungs, as aspiration of material into the lungs can cause chemical pneumonitis which can be fatal. Immediately call a POISON CENTER or doctor/physician.	
<b>Eye:</b>	Immediately irrigate with large quantities of water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: Get medical advice/attention.	
<b>Skin:</b>	Wash exposed area thoroughly with soap and water. Remove contaminated clothing. If skin irritation occurs: Get medical advice/attention.	
<b>Inhaled:</b>	Give fresh air, careful not to become a casualty yourself. Remove and loosen clothing. If breathing is normal make patient comfortable and keep warm till recovered. If breathing is difficult ensure the airways are clear and have a qualified person give oxygen from a face mask. If breathing has stopped commence (EAR) and if cardiac arrest has occurred, commence (CPR) and get medical advice/attention urgently.	
<b>Possible Symptoms:</b>	<b>Acute</b>	<b>Delayed</b>
<b>Ingestion:</b>	Can result in headaches, nausea, vomiting and diarrhoea.	May cause irritation to the mucous membranes of the digestive system. May result in damage to the liver and kidney, blood disorders and may affect the central nervous system.
<b>Eye:</b>	May cause redness, tearing or blurred vision.	Will cause discomfort and may cause redness, itching or blurred vision.
<b>Skin:</b>	May cause skin irritation.	May cause dermatitis and eczema.
<b>Inhaled:</b>	Vapour concentrations above exposure limits may be irritating to the respiratory tract, may cause headaches and dizziness. Prolonged exposure may result in unconsciousness.	Vapour concentrations above exposure limits may cause irritation to the mucous membranes of the respiratory system. May result in damage to the liver and kidney, blood disorders and may affect the central nervous system.
<b>Advice To Doctor:</b>	Treat Symptomatically.	

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Foam, Carbon Dioxide or Dry Chemical Powder.

**Hazards from Combustion Products:** If involved in a fire, toxic materials such as carbon monoxide, carbon dioxide, nitrogen oxide, isocyanate vapour, traces of hydrogen cyanide, hydrogen chloride gas, hydrogen fluoride gas, various chlorine and/or fluorine compounds as well as hydrocarbons may form.

**Precautions for Firefighters:** Heating can cause rupture of containers with explosive force. If safe do so, remove all sources of ignition and any containers from the path of the fire. Keep cool with water spray.

Firefighters should wear self contained breathing apparatus with a full face and operated in the positive pressure mode.

**Hazchem Code:** 3[Y]E

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** In case of an accidental release or spill, evacuate the danger area. Wear the correct Personal Protective Equipment (See section 8 of SDS). Do not breathe vapours. Extinguish all ignition sources and shut off the source of the spill. Ventilate the area.

**Environmental Precautions:** Avoid release to the environment by bunding or covering drains.

**Containment:** Contain and absorb the spill with absorbent material such as sand, soil or vermiculite. Transfer the material into drums, using non-sparking tools. Seal and label the drums. Contact the appropriate waste management authority for disposal.

## 7. HANDLING AND STORAGE

**Precautions For Safe Handling:** Wear the correct Personal Protective Equipment (See Section 8 of the SDS) when using this product. Ground the container and receiving equipment whilst using. Only use non-sparking tools and take precautionary measures against static discharge.

Apply this product in a spray paint booth with an adequate exhaust system and explosion-proof electrical, ventilation, and lighting equipment.

Never eat, drink or smoke whilst handling this product. Always wash hands thoroughly after using this product and before smoking, eating, drinking or using the toilet.

**Conditions For Safe Storage:** Keep containers away from heat/sparks/open flames/ hot surfaces. Store containers in a well-ventilated area and away sources of ignition, oxidising agents and/or foodstuffs. Store containers in a cool place and out of direct sunlight. Keep containers tightly closed when not in use and check regularly for leaks.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Limits:

	OSHA PEL –TWA (mg/m <sup>3</sup> )	NIOSH REL –TWA (mg/m <sup>3</sup> )
Hexamethylene Diisocyanate Homopolymer	Not Available	Not Available
p-Chlorobenzotrifluoride	Not Available	Not Available
Methoxy Propyl Acetate	Not Available	Not Available
N-Butyl Acetate	710	710

**Engineering Controls:** Ensure sufficient ventilation to maintain concentration below exposure standard. Keep containers sealed when not in use. Earth any mixing vessels when using this product. Apply the product in a spray paint booth with an adequate exhaust system and explosion-proof electrical, ventilation, and lighting equipment. The sprayer must wear a self-contained breathing apparatus, with a full face and operated in the positive pressure mode. If spray paint booth is unavailable and the product is used in a well ventilated area, then:

- the sprayer must wear a self-contained breathing apparatus, with a full face and operated in the positive pressure mode;
- the area must be well isolated from other persons, which may mean only the sprayer is at the workplace and everyone else has left. In this case, well isolated means there is no potential for anyone else at that workplace (or passing the workplace) to be exposed to the dust/fume/gas/mist/vapours/spray;
- and adequate time must be allowed after the spraying is completed before other persons enter the workplace - e.g. the following morning.

**Personal Protection:** Skin contact should be avoided by wearing impervious work clothing, boots and Neoprene or PVC gloves. Eyes should be protected by chemical goggles or safety glasses fitted with side shields (Refer to AS/NZS 1337). When using this product, a self-contained breathing apparatus, with a full face and operated in the positive pressure mode, must be used. (Refer to AS/NZS 1715 and 1716).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Thin clear liquid.
Odour:	Strong solvent odour.
Odour Threshold:	Not Available
pH:	Not Applicable.
Melting Point/Freezing Point:	Not Applicable
Boiling Point Range:	96 – 145°C
Flash Point:	22°C (Closed Cup)
Evaporation Rate:	0.40 – 1.00 (Butyl Acetate = 1)
Flammability:	Flammable liquid and vapour.
Flammability Limits:	1 (LEL) to 8% (UEL) by volume
Vapour Pressure:	1.2 kPa @ 20°C
Vapour Density:	Not Available
Relative Density:	1.15 – 1.25
Solubility In Water:	Not Available
Partition Coefficient: n-octanol/water:	Not Available
Auto-ignition Temperature:	354°C
Decomposition Temperature:	Not Available
Viscosity:	15 – 25 seconds F4 Cup @ 25°C

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under ordinary conditions of use and storage.

**Conditions to Avoid:** Avoid all ignition sources.

**Incompatible Materials:** None

**Hazardous Decomposition Products:** If involved in a fire, toxic materials such as carbon monoxide, carbon dioxide, nitrogen oxide, isocyanate vapour, traces of hydrogen cyanide, hydrogen chloride gas, hydrogen fluoride gas and various chlorine and fluorine compounds and hydrocarbons may form.

**Hazardous Reactions:** Exothermic reaction with amines and alcohols. Reacts slowly with water forming Carbon Dioxide.

## 11. TOXICOLOGICAL INFORMATION

There is no data available on this product itself. The following information (where available) relates to the individual ingredients of the product.

### Acute Toxicity – Oral:

Ingredient	Value (LD50)	Species	GHS Category
Not Available			

### Health Effects:

**Acute:**

**Chronic:**

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### Acute Toxicity – Dermal:

Ingredient	Value (LD50)	Species	GHS Category
Not Available			

### Health Effects:

**Acute:**

**Chronic:**

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### Acute Toxicity – Inhalation:

Ingredient	Value (LC50)	Species	GHS Category
Not Available			

### Health Effects:

**Acute:**

**Chronic:**

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### Skin Corrosion/Irritation:

p-Chlorobenzotrifluoride  
N-Butyl Acetate

### GHS Category

2

**Health Effects:** Causes skin irritation.

**Acute:** Causes skin irritation.

**Chronic:** Repeated exposure may cause skin dryness and cracking. Also may cause dermatitis and eczema.



**Eye Damage/Irritation:**  
Not Available

**GHS Category**

**Health Effects:**

**Acute:**

**Chronic:**

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**Respiratory or Skin Sensitation:**  
Hexamethylene Diisocyanate Homopolymer

**GHS Category**  
1B

**Health Effects:** May cause allergic skin reaction.

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**Germ Cell Mutagenicity:**  
Not Available

**GHS Category**

**Health Effects:**

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**Carcinogenicity:**

p-Chlorobenzotrifluoride

**GHS  
Category**  
2

**ACGIH**

**EPA**

**IARC**

**NTP**

**NIOSH**

2B

YES

**Health Effects:** Suspected of causing cancer.

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**Toxic To Reproduction:**  
Not Available

**GHS Category**

**Health Effects:**

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**Specific Target Organ Toxicity (Single Exposure):**  
N-Butyl Acetate

**GHS Category**  
3

**Health Effects:** May cause drowsiness or dizziness. May cause respiratory irritation.

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**Specific Target Organ Toxicity (Repeated Exposure):**  
Not Available

**GHS Category**

**Health Effects:**

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**Aspiration Hazard**  
Not Available

**GHS Category**

**Health Effects:**

## 12. ECOLOGICAL INFORMATION

**Environmental Precautions:** Avoid release to the environment, the product should not be allowed to enter drains, water courses or the soil.

There is no data available on this product itself. The following information (where available) relates to the individual ingredients of the product.

### Hazardous To The Aquatic Environment – Acute Hazard:

Ingredient	Value (LC50)	Species	GHS Category
Not Available			

**Effects:**

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### Hazardous To The Aquatic Environment – Long Term Hazard:

Ingredient	Value (LC50)	Species	GHS Category
p-Chlorobenzotrifluoride	2.0 mg/L 48hr	Crustacean	3
p-Chlorobenzotrifluoride	3.0 mg/L 96hr	Fish	3
p-Chlorobenzotrifluoride	0.4 mg/L 72hr	Algae	3

**Effects:** Harmful to aquatic life with long lasting effects.

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### Exotoxic To Terrestrial Vertebrates:

Ingredient	Value (LD50)	Species	NZ Category
Not Available			

**Effects:**

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**Persistence and Degradability:** No information available.

**Bioaccumulative Potential:** No information available.

**Mobility in Soil:** No information available.

### 13. DISPOSAL CONSIDERATIONS

Product and container should be disposed of in accordance with all local, regional, national and international 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.

### 14. TRANSPORT INFORMATION

**DOT:**

Shipping Name: PAINT  
UN Number: 1263  
Class: 3  
Packaging Group II  
Emergency Response 128

**ADG (Land):**

Shipping Name: PAINT  
UN Number: 1263  
Hazard Class: 3  
Subsidiary Risk: Not Applicable  
Packaging Group II  
Hazchem 3[Y]E

**IMGD (Sea):**

Shipping Name: PAINT  
UN Number: 1263  
Hazard Class: 3  
Subsidiary Risk: Not Applicable  
Packaging Group: II  
Marine Pollutant: No  
EmS: F-E,S-E

**ICAO/IATA (Air):**

Shipping Name: PAINT  
UN Number: 1263  
Hazard Class: 3  
Subsidiary Risk: Not Applicable  
Packaging Group II

### 15. REGULATORY INFORMATION

**Poisons Schedule:** Not Scheduled - According to the Australian Standard for the Uniform Scheduling of Medicines and Poisons. (SUSMP)

**HMIS Classification:** Health Hazard: 1  
Flammability: 3  
Physical: 0  
Reactivity: 0

**NFPA Class:** IB

**WHMIS Classification:** B2  
B3  
D1A  
D2A  
D2B

**Emergency Planning Community Right-To-Know (EPCRA)**

**SARA 302 Components:** SARA 302: No chemicals in this product are subject to the reporting requirements of SARA Title III, Section 302

**SARA 313 Components:** SARA 313: No chemicals in this product are subject to the reporting requirements of SARA Title III, Section 313

**Toxic Substances Control Act (TSCA)**

**TSCA Status:** We certify that all of the components of this product are listed on the TSCA inventory.

**Hazardous Air Pollutants:**

This product does not contain any chemical that is classified as a Hazardous Air Pollutant.

**Massachusetts Right-To-Know Components:**

<b>Chemical Entity / Hazardous Component</b>	<b>CAS Numbers</b>
N-Butyl Acetate	123-86-4

**Pennsylvania Right-To-Know Components:**

<b>Chemical Entity / Hazardous Component</b>	<b>CAS Numbers</b>
N-Butyl Acetate	123-86-4

**New Jersey Right-To-Know Components:**

<b>Chemical Entity / Hazardous Component</b>	<b>CAS Numbers</b>
N-Butyl Acetate	123-86-4

**California Prop. 65 Components:**

<b>Chemical Entity / Hazardous Component</b>	<b>CAS Numbers</b>
p-Chlorobenzotrifluoride	98-56-6



“This product can expose you to chemicals including p-Chlorobenzotrifluoride (CAS No 98-56-6), which are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).”

**NPRI Components:**

<b>Chemical Entity / Hazardous Component</b>	<b>CAS Numbers</b>
Methoxy Propyl Acetate	108-65-6
N-Butyl Acetate	123-86-4

**16.OTHER INFORMATION**

Date of Issue: 04/13/22  
Replaces Issue Dated: 04/27/20

The above information has been presented in good faith and is accurate to the best of our knowledge, at the time of preparation. All of the information supplied herein is related only to the health and safety issues of the product. Users should assume all responsibility for its use, as the conditions under which this product is used are beyond our control. For technical information on the use of this product users should consult the appropriate Technical Data Sheet.

**END OF SDS**