**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** Part B Catalyst  
**Part Number:** CF-0353  
**GENERAL USE:** Catalyst  
**PRODUCT DESCRIPTION:** Yellow liquid, slight characteristic odor

**MANUFACTURER’S NAME**  
Praetorian Protective Finishes, LLC.

**ADDRESS (NUMBER, STREET, P.O. BOX)**  
206 North River Ridge Circle

**CITY, STATE AND ZIP CODE**  
Burnsville, MN 55337

**COUNTRY**  
USA

**DATE PREPARED:** April 8, 2008  
**SUPERSEDES:** New

**TELEPHONE NUMBER FOR INFORMATION**  
(952) 895-6962

**EMERGENCY TELEPHONE NUMBER**  
Chemtrec (800) 424-9300  Outside USA (703) 527-3887

**SECTION 2 - HAZARDOUS INGREDIENTS**

**HAZARDOUS COMPONENTS**  
<table>
<thead>
<tr>
<th>Component Description</th>
<th>% (by weight)</th>
<th>CAS #</th>
<th>EINECS #</th>
<th>Hazard Symbol</th>
<th>RISK PHRASES Full Text Section 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homopolymer of hexamethylene disocyanate (*)</td>
<td>60 - 100</td>
<td>28182-81-2</td>
<td>Not found</td>
<td>Xi</td>
<td>R-36/37/38, 42/43</td>
</tr>
<tr>
<td>Hydrophilic aliphatic polyisocyanate based on hexamethylene disiocyanate</td>
<td>15 - 25</td>
<td>Not specified</td>
<td>Not specified</td>
<td>Xi</td>
<td>R-36/37/38</td>
</tr>
</tbody>
</table>

(*) The ACGIH Time Weighted Average (TWA) has not been established nor has OSHA established the Permissible Exposure Limit (PEL) for this product, therefore the limits described have been established as guidelines by the manufacturer.

**SECTION 3 - HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

Yellow liquid, nearly odorless. May cause eye, skin and respiratory tract irritation. May cause allergic respiratory reaction. Harmful if inhaled or swallowed. May cause lung damage. As a result of previous overexposures by inhalation, or a single large dose, certain individuals may develop isocyanate sensitization which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Prolonged skin contact can cause skin sensitization. Individuals who have developed skin sensitization can develop symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor. Toxic gases are emitted during burning or thermal decomposition. Hazard symbols - Xi. Risk Phrases - R36/37/38, 42/43

**POSSIBLE HEALTH EFFECTS**

**INHALATION:** High concentrations are irritating to the respiratory tract; may cause headache, dizziness, nausea, vomiting and malaise. Chronic overexposures, or a single large dose, may cause isocyanate sensitization and subsequent reaction to a later exposure to isocyanate at levels well below the TLV

**SKIN:** Brief contact may cause slight irritation; prolonged contact may cause moderate reddening, swelling and possible necrosis. Chronic exposure may result in skin sensitization, which can cause symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor. Cured material is hard to remove.

**EYES:** Contact causes severe irritation and pain associated with redness and swelling of the conjunctiva.

**INGESTION:** Moderately toxic; may cause headache, dizziness, diarrhea and general weakness; large doses may result in red blood cell hemolysis.

**CARCINOGENICITY**

<table>
<thead>
<tr>
<th>NTP?</th>
<th>IARC MONOGRAPHS?</th>
<th>OSHA REGULATED?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
**SECTION 4 - FIRST AID MEASURES**

**INHALATION:** Remove affected person to fresh air; provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR and seek emergency medical attention.

**SKIN:** Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.

**EYES:** Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.

**INGESTION:** DO NOT induce vomiting; if vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs; seek immediate medical attention. Vomiting may be induced only under the supervision of a physician.

**SECTION 5 - FIRE FIGHTING MEASURES**

**GENERAL HAZARDS:** Product will support combustion. Products of combustion include compounds of carbon, hydrogen, nitrogen and oxygen, including carbon monoxide.

**EXTINGUISHING MEDIA**
Carbon dioxide, water fog, dry chemical, chemical foam

**FIRE FIGHTING PROCEDURES**
Firefighters must wear full facepiece self-contained breathing apparatus in positive pressure mode. Do not use solid stream of water since stream will scatter and spread fire. Fine water spray can be used to keep fire - exposed containers cool.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**
Closed containers can explode due to buildup of pressure when exposed to extreme heat.

**HAZARDOUS COMBUSTION PRODUCTS**
Smoke, fumes, oxides of carbon, oxides of nitrogen and traces of HCN.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** COMBUSTIBLE - Evacuate and ventilate area; remove all sources of sparks, ignition and open flames; confine and absorb into approved absorbent; place material into approved containers for disposal; do not wash to sewer or waterway. Clean up spill area with a decontaminating solution made up of 50% isopropanol, 45% water and 5% concentrated ammonia solution (% by weight). The solution should cover the area for at least one hour. Absorb with an inert absorbent. Collect washings for disposal.

**SECTION 7 - HANDLING AND STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** This material is combustible. It should be stored in tightly closed containers in a cool, well ventilated area. All sources of ignition should be controlled. Keep this and other chemicals out of reach of children. Avoid inhaling concentrated fumes or vapors. Polysocyanates will react with the water in the system to form carbon dioxide. The formation of carbon dioxide will generate pressure in a sealed container causing the container to expand and possibly rupture explosively.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENTS</th>
<th>NIOSH</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA ppm</td>
<td>TWA mg/m3</td>
</tr>
<tr>
<td>Homopolymer of hexamethylene disocyanate (*)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Hydrophilic aliphatic polysocyanate based on hexameth</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

(*) The ACGIH Time Weighted Average (TWA) has not been established nor has OSHA established the Permissible Exposure Limit (PEL) for this product, therefore the limits described have been established as guidelines by the manufacturer.

**PERSONAL PROTECTION:**

**RESPIRATORY PROTECTION (SPECIFY TYPE):** None required while threshold limits (Section 2) are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator approved for use in isocyanate - containing environments must be worn.

**PROTECTIVE GLOVES:** Neoprene or rubber gloves with cuffs.

**EYE PROTECTION:** Chemical splash goggles. Refer to 29 CFR 1910.133 or European Standard EN166.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Coveralls, apron, or other equipment should be worn to minimize skin contact.

**WORK / HYGIENIC PRACTICES:** Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.
**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR**
Yellow liquid, slight characteristic odor

**PH**
Not applicable

**BOILING POINT / BOILING RANGE**
Not specified

**FLASH POINT**
365° F (185° C)

**FLAMMABLE LIMITS**
LEL: Not applicable  UEL: Not applicable

**AUTOIGNITION TEMPERATURE**
883° F (445° C)

**SOLUBILITY IN WATER**
Insoluble - reacts slowly with water to liberate CO₂ gas

**VAPOR PRESSURE**
< 0.01 mm Hg @ 20 °C

**SPECIFIC GRAVITY (WATER = 1)**
1.150

**VISCOSITY**
Approximately 800 mPa’s @ 68° F

**VAPOR DENSITY (AIR = 1)**
Not determined

**EVAPORATION RATE (WATER = 1)**
Not volatile

**SECTION 10 - STABILITY AND REACTIVITY**

**STABILITY**
STABLE: X

**CONDITIONS TO AVOID:**
Extreme temperatures, open flames

**INCOMPATIBILITY (MATERIALS TO AVOID):**
Strong oxidizers, strong acids

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:**
Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, oxides of nitrogen, hydrocarbons, fumes, and smoke may be produced.

**HAZARDOUS POLYMERIZATION**
MAY OCCUR: X
WILL NOT OCCUR:

**CONDITIONS TO AVOID:**
Contact with moisture or other materials which react with isocyanates may cause polymerization.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

**Hazardous Components**

<table>
<thead>
<tr>
<th>Component Description</th>
<th>CAS #</th>
<th>LD50 of Ingredient (Specify Species and Route)</th>
<th>LC50 of Ingredient (Specify Species)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homopolymer of hexamethylene diisocyanate (*)</td>
<td>28182-81-2 Not found</td>
<td>&gt; 5,000 mg / kg Oral - rat</td>
<td>390 - 453 mg / m³ / 4H Inhalation - rat</td>
</tr>
<tr>
<td>Hydrophilic aliphatic polyisocyanate based on hexamethylene diisocyanate</td>
<td>Not specified</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

**SECTION 12 - ECOLOGICAL INFORMATION**

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHOD:
Dispose of in accordance with Local, State, and Federal Regulations. This product may produce hazardous vapors or fumes in a closed disposal container creating a dangerous environment. Refer to “40 CFR Protection of Environment Parts 260 - 299” for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway.

**SECTION 14 - TRANSPORT INFORMATION**

**PROPER SHIPPING NAME:** Not Regulated

**DOT HAZARD CLASS / Pack Group:** Not regulated

**REFERENCE:** Not Applicable

**UN / NA IDENTIFICATION NUMBER:** None

**LABEL:** None Required

**HAZARD SYMBOLS:** None

**IATA HAZARD CLASS / Pack Group:** Not regulated

**IMDG HAZARD CLASS:** Not regulated

**RID/ADR Dangerous Goods Code:** Not regulated

**UN TDG Class / Pack Group:** Not regulated

**Hazard Identification Number (HIN):** None

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.
SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act)
All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (USA - Superfund Amendments and Reauthorization Act)
311/312 Hazard Categories
Immediate health, delayed health

313 Reportable Ingredients:
None

CERCLA (USA - Comprehensive Response Compensation and Liability Act)
None

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986
There are no reportable chemicals present known to the state of California to cause cancer or reproductive toxicity.

CPR (Canadian Controlled Products Regulations)
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification: D2B

IDL (Canadian Ingredient Disclosure List)
Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)
Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

EINECS (European Inventory of Existing Commercial Chemical Substances)
Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

SECTION 16 - OTHER INFORMATION

Notes & full R-Phrase text
R36/37/38 Irritating to eyes, respiratory system and skin
R42/43 May cause sensitization by inhalation and skin contact

HMIS HAZARD RATINGS
HEALTH 2*  * = Chronic Health Hazard 2 = MODERATE
FLAMMABILITY 1 0 = INSIGNIFICANT 3 = HIGH
PHYSICAL HAZARD 1 1 = SLIGHT 4 = EXTREME
PERSONAL PROTECTIVE EQUIPMENT B Safety Glasses, Gloves

REVISION SUMMARY:
This MSDS has been revised in the following sections:
No changes noted

MSDS Prepared by: Comprehensive Data Base, Inc.
P.O. Box 395
Intercession City, FL 33848 USA
(863) 644 - 3298  www.compdatabase.com or www.msdss.cc

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.