

**M A T E R I A L   S A F E T Y   D A T A   S H E E T****PRODUCT NAME:** MS Urethane Clearcoat**PRODUCT CODE:** PS-4200**HMIS CODES: H F R P**  
3 3 0 G**SECTION I: MANUFACTURER'S IDENTIFICATION****MANUFACTURER'S NAME:**

Teknol Inc.

**ADDRESS:**2650 Nordic Rd.  
Dayton, Oh 45414**EMERGENCY PHONE** : (800) 424 - 9300  
**INFORMATION PHONE** : (937) 280 - 0085  
**FAX NUMBER** : (937) 264 - 7844**DATE PRINTED** : 2/21/03**SECTION II: HAZARDOUS INGREDIENTS/SARA III INFORMATION**

| REPORTABLE COMPONENTS   | CAS#      | VAPOR PRESSURE WEIGHT |         |         |
|---|-----------|-----------------------|---------|---------|
|   |           | mm Hg@TEMP            | PERCENT |         |
| * Xylene<br>OSHA TWA 100ppm, STEL 150ppm  | 1330-20-7 | 9.5                   | 20 C    | 30 - 35 |
| Isobutyl Acetate<br>OSHA PEL 150 ppm (TWA)<br>ACGIH TLV 150 ppm (TWA)                       | 110-19-0  | 12.5                  | 20 C    | 5 - 10  |
| * Ethylbenzene<br>OSHA TWA 100ppm, STEL 125ppm  | 100-41-4  | 7.1                   | 20 C    | 5 - 10  |
| Benzene,1-chloro-4-trifluoromethane (PCBTF)<br>PEL: Not Established<br>TLV: Not Established | 98-56-6   | 5.3                   | 20 C    | 1 - 5   |

\* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.  
**WARNING:** DETECTABLE AMOUNTS OF A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND/OR BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM MAY BE PRESENT IN THIS PRODUCT.

**SECTION III: PHYSICAL/CHEMICAL CHARACTERISTICS****BOILING RANGE:**

244 F - 290 F

**VAPOR DENSITY:**

Heavier than air.

**COATING V.O.C.:****SPECIFIC GRAVITY (H2O=1):**

.9963

**EVAPORATION RATE:**

Faster than n-butyl acetate.

**MATERIAL V.O.C.:**

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4.11 lb/gl

**SOLUBILITY IN WATER:**

Non Soluble.

4.02 lb/gl

**APPEARANCE AND ODOR:**

Clear liquid, solvent odor.

**SECTION IV : FIRE AND EXPLOSION HAZARD DATA****FLASH POINT:**

64.0 F

**METHOD USED:**

TCC

**FLAMMABLE LIMITS IN AIR BY VOLUME:****LOWER:**

0.9

**UPPER:**

10.5

**EXTINGUISHING MEDIA:**

Carbon dioxide, dry chemical, foam and water spray.

**SPECIAL FIREFIGHTING PROCEDURES:**

Never use welding or cutting torch on or near containers (even empty) because product (even just residue) can ignite explosively. Respiratory equipment should be worn to avoid inhalation of concentrated vapors. Water should not be used except as a fog to keep nearby containers cold.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

Handle as flammable liquid. Vapors form explosive mixture in air between upper and lower explosive limits which can be ignited by many sources such as pilot lights, open flames, electrical motors and switches. Water should be used to cool containers exposed to fire. Fire fighting personnel should wear self-contained breathing apparatus.

**SECTION V : REACTIVITY DATA****STABILITY:**

Stable under non-emergency conditions.

**CONDITIONS TO AVOID:**

High temperatures, flame, sparks. Excessive heat, poor ventilation, corrosive atmospheres, excessive age. Poor ventilation, corrosive atmospheres. Avoid strong acids or bases in bulk and elevated temperatures.

**INCOMPATIBILITY (MATERIALS TO AVOID):**

Alkaline materials, strong acids, and oxidizing agents.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:**

Oxides of carbon, toxic fumes, peroxides.

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Will not occur.

**SECTION VI : HEALTH HAZARD DATA****INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:**

Routes of Entry: inhalation, skin contact, ingestion, eyes. Acute: Nose and throat irritation, lung injury, allergic respiratory reaction, nausea, cough, shortness of breath, dehydration, dizziness, weakness, headache, anesthesia, drowsiness, fatigue, chest pain, vomiting, central nervous system effects, asphyxiation.

**SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:**

Eye Contact: acute: irritation, redness, pain, blurred vision, sensation of seeing halos around lights and reversible damage. Eye Contact: contact lenses must be removed, flush water for at least 15 minutes, consult a physician immediately.

**SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:**

Skin Contact: acute: extraction of natural oils with resulting dry skin, irritation, allergic skin reactions, redness and dermatitis. Can be absorbed through the skin causing drowsiness.

**INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:**

Acute: gastrointestinal irritation, nausea, vomiting, diarrhea, weakness, dizziness, drowsiness, fatigue, lack of coordination, central nervous system effects, and depression.

**HEALTH HAZARDS (ACUTE AND CHRONIC):**

In all cases if symptoms persist, seek medical attention. Other Health Effects: intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

**CARCINOGENICITY: NTP CARCINOGEN:**

No

**IARC MONOGRAPHS:**

No

**OSHA REGULATED:**

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Yes

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:**

Pulmonary conditions, liver conditions, kidney conditions, respiratory conditions, neurological disorders, cardiovascular diseases, pregnancy, reproductive system disorders.

**EMERGENCY AND FIRST AID PROCEDURES:**

Inhalation Overexposure: move person to fresh air. If breathing stops apply artificial respiration and seek immediate medical attention.

Eye Contact: Flush with large quantities of water for 15 minutes.

Skin Contact: Wash thoroughly with soap and water and see a doctor.

Ingestion: Do not induce vomiting, can cause chemical pneumonitis and pulmonary edema. Contact physician immediately.

**SECTION VII : PRECAUTIONS FOR SAFE HANDLING AND USE****STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Eliminate ignition sources, provide good ventilation, dike spill area and add absorbant earth or sawdust to spilled liquid.

**WASTE DISPOSAL METHOD:**

Collect absorbent/spilled liquid mixture into metal container cover and seal container. Consult local, state, & federal hazardous waste regulations before disposing into approved hazardous waste landfill. Obey relevant laws. Dispose of in accordance with federal, state or provincial and local pollution requirements. In addition, rags spray booth filters, paint suits, empty cans, etc., contaminated with product may be hazardous waste. Determine whether contaminated items are hazardous and dispose of as appropriate. Clean preferably with a detergent, avoid the use of solvents.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:**

Handing & Storage: Use approved bonding and grounding procedures when transferring liquid to another container. Do not transfer to unlabeled containers. No smoking. Store plastic containers of flammable liquids inside closed, approved boxes or safety cabinets. Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use.

**OTHER PRECAUTIONS:**

Smoking in area where this material is used should be strictly prohibited. Tools used with this material should be made from aluminum, brass or copper. Plastic utensils should not be used. Note: This information is accurate to the

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best of our knowledge but is furnished without any expressed or implied warranties. These products may be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Other Precautions: Vapors are heavier than air and may travel along floors. Use explosion proof equipment in areas where there is spraying or open containers. Do not take internally. Observe label precautions. Keep closures tight and container upright to prevent leakage. Avoid breathing sanding dust. The information contained in this safety data sheet does not constitute the user's own assessment of the workplace risks but requires the assessment of a qualified safety professional. This material has an offensive odor. Prolonged exposure may reduce the user's sensitivity to the odor, thus reducing the effectiveness of odor as a warning against exposure.

**SECTION VIII : CONTROL MEASURES****RESPIRATORY PROTECTION:**

When spraying this material use NIOSH approved cartridge respirator to keep airborne mists and vapor concentrations below the time weighted threshold limit values. When using in poorly ventilated and confined spaces, use a fresh-air supplying respirator or self-contained breathing apparatus. Where overspray is present, a positive pressure air supplied respirator should be worn. If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2 may be effective. Follow respirator manufacturer's directions for use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. NO PERSONS SHOULD BE ALLOWED IN THE AREA WHERE THESE PRODUCTS ARE BEING USED UNLESS EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS. When sanding or blasing the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

**VENTILATION:**

General mechanical ventilation or local exhaust should be suitable to keep vapor concentrations below TLV. Ventilation equipment must be explosion proof. Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL. For baking finishes, exhaust vapors emitted during heating. Remove decomposition products formed during welding or flame cutting of surfaces coated with this product.

**PROTECTIVE GLOVES:**

Protective Gloves: Required for prolonged or repeated contact. Use solvent resistant gloves. Barrier creams are not substitutes for full physical

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protection. Refer to safety equipment supplier for effective glove recommendations.

**EYE PROTECTION:**

Eye Protection: Use safety goggles or face shield designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:**

In cases where no monitoring for airborne contaminants has been carried out, assume maximum exposure and use antistatic paint suit, goggles, gloves, and air supplied respiratory equipment. All personal protective should meet NIOSH or OSHA requirements.

**WORK/HYGIENIC PRACTICES:**

Eye washes and safety showers in the workplace are recommended. Hygienic Practices: Do not eat, drink or smoke in work areas. Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

**SECTION IX : DISCLAIMER**

Do not handle until the manufacturer's safety precautions have been read and understood. Regulations require that all employees be trained on Material Safety Data Sheets for all products with which they come in contact. While we believe that the data contained herein is accurate and derived from qualified sources, the data are not to be taken as a warranty or representation for which we assume legal responsibility. They are offered solely for your consideration, investigation, and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state, provincial and local laws and regulations.