

**MATERIAL SAFETY DATA SHEET**  
**FOR COATINGS, RESINS, AND RELATED MATERIALS**  
**DATE OF PREPARATION - 01-03-2009**  
**Prepared by: Compliance Dept.**

**SECTION I - PRODUCT IDENTIFICATION**

**MANUFACTURER:** Munro Products  
**DISTRIBUTOR:** 9150 Clarence Center Road  
Clarence Center, NY 14032

**INFORMATION:** 716/741-9450  
**EMERGENCY:** **CHEMTREC® 1-800-424-9300**

**PRODUCT CLASS:** MODIFIED RESIN CATALYST  
**TRADE NAME:** **Ultra Glas 2000 Top Coat Hardener**

**CODE:** M15000

**SECTION II - HAZARDOUS INGREDIENTS**

COMMON NAME	ACGIH TLV (PPM)	OSHA PEL (PPM)	VAPOR PRESSURE (mm Hg@20 C)	CHEMICAL NAME
(A) XYLENE 3	150	150	10	DIMETHYL BENZENE
ETHYL ACETATE 21	400	400	86	ETHYL ACETATE
TOLUENE 10	150	200	23	METHYL BENZENEACETATE
CELLOSOLVE ACETATE 25	NE	100	2	2 ETHOXYETHYLETHANOATE
ALIPHATIC POLYISOCYANATE 41	0.02	0.02	0	BIURET OF 1,6 HEXAMETHYLENE DIISOCYANTE

\*Values given are in mg/M3

Care should be taken when sanding pigmented paints. Airborne nuisance particulates have an ACGIH TLV of total dust = 10mg/M3

This material does not contain intentionally added ingredients which are base on compounds of antimony, arsenic, cadmium, lead, mercury, selenium, or water soluble barium.

**SECTION III - PHYSICAL DATA**

**WEIGHT PER GALLON:** 8.33 LBS **VOLUME PERCENT VOLATILE:** 64

**BOILING RANGE:** 168-382 F **VOC OF MATERIAL:** 588 gms/1

**EVAPORATION RATE:** Slower than Ether

**VAPOR DENSITY:** Heavier than Air

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

**DANGER! – FLAMMABLE**  
**VAPORS MAY CAUSE FLASH FIRE**

FLASH POINT: 24 F TCC LEL: 1.10  
AUTOIGNITION TEMPERATURE: 499 C / 930 F UEL: 7.0  
EXTINGUISHING MEDIA: Dry Chemical or Foam

**UNUSUAL FIRE AND EXPLOSION HAZARDS** : Keep away from heat, sparks, and flame. Do not smoke. Extinguish all pilot lights and turn off all sources of ignition including heaters, fans and other non-explosion-proof electrical equipment, during use and until all vapors are gone. Vapors may ignite explosively. Vapors may spread long distances and beyond closed doors. Prevent build up of vapors by maintaining a continuous flow of fresh air.

**SPECIAL FIREFIGHTING PROCEDURES** : Self contained breathing apparatus with a full facepiece operated in pressure-demand or other positive pressure mode. In case of fire use CO2, Dry Chemical, Foam or other approved method for treating a Class B fire. Summon professional firefighters. During a fire, toxic gases and smoke are irritants present from decomposition/combustion. Closed container may explode when exposed to extreme heat.

**SECTION V - HEALTH HAZARD DATA**

**EFFECTS OF OVEREXPOSURE (ACUTE):**

**EYES:** Liquid aerosols or vapors of the product are irritating and can cause tearing, reddening, blurred vision, and swelling accompanied by a stinging sensation and maybe a feeling like that of fine dust in the eyes.

**SKIN:** Isocyanates react with skin protein and moisture and can cause irritation. Symptoms of skin irritation may be reddening, swelling, rash, scaling or blistering. Solvents can penetrate the skin causing effects similar to those identified under acute breathing symptoms. Some persons may develop skin sensitization from skin contact. Cured material is difficult to remove.

**BREATHING:** Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation. May also cause tightness in the chest. Isocyanate vapors or mist at concentrations above the suggested TLV can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting nonspecific bronchial hyperreactivity can respond to concentrations below the TLV with similar symptoms as well as an asthma attack. Exposure well above the TLV may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). These effects are usually reversible. Chemical or hypersensitive pneumonitis with flu-like symptoms (e.g. fever, chills) has also been reported.

**SWALLOWING:** **INGESTION IS HARMFUL** and can cause a burning sensation, nausea, vomiting, and diarrhea. Can result in irritation and possible corrosive action in the mouth, stomach tissue and digestive tract.

**ADDITIONAL EFFECTS OF OVEREXPOSURE (CHRONIC)**

- Loss of appetite and a bad taste may be noted at high concentrations of years.
- Narcotic effects have been noted.
- Prolonged and repeated breathing of spray mist and/or sanding dust over a period of years may cause diseases of the lungs.
- May cause injury to kidneys, liver, and lungs.
- Allergic skin or respiratory reaction may occur in some individuals. Respiratory sensitivity results in asthmatic-like symptoms or subsequent exposure even below the TLV. Skin sensitivity results in allergic

dermatitis which may include rash, itching, hives and swelling of extremities. In those who have developed a skin sensitization these symptoms can develop as a result of contact with very small amounts of liquid material or even as a result of vapor-only exposure.

– High vapors may result in central nervous system depression.

– Hemorrhages into various vital organs have been noted.

– Coma may result from overexposure.

– As a result of previous repeated overexposure or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV. These symptoms, which include: chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be immediate or delayed up to several hours after exposure. Similar to many non-specific asthmatic responses there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in sever cases for several years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including decrease in lung function, which may be permanent. Sensitization may be either temporary or permanent.

**WARNING!** Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

**WARNING!** Harmful or fatal if swallowed. Harmful if inhaled or absorbed through skin. Overexposure may cause blood disorders. Based on tests with laboratory animals, overexposure may cause reproductive disorders and birth defects.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Asthma and any other respiratory disorders (bronchitis, emphysema, hyperactivity), skin allergies, eczema.

Product ingredients appear on the following carcinogenic listings:

( ) IARC ( ) NTP ( ) OSHA (X) None of the above

**PRIMARY ROUTES OF ENTRY:** (X) SKIN (X) BREATHING (X) SWALLOWING

#### **FIRST AID:**

**IN CASE OF SKIN CONTACT:** Wash area thoroughly with soap and water. Remove soiled clothing. Get medical assistance if irritation persists. Wash clothing before reuse.

**IN CASE OF EYE CONTACT:** Flush with large amounts of water for at least 15 minutes. Get medical assistance.

**IF SWALLOWED: GET MEDICAL ATTENTION IMMEDIATELY. DO NOT** induce vomiting. Aspiration of material into lungs can cause chemical pneumonitis which may be fatal.

**IF INHALED:** If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, summon medical assistance immediately. If breathing ceases, restore using approve CPR techniques and summon medical help immediately. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic.

---

#### **SECTION VI - REACTIVITY DATA**

**POLYMERIZATION:** May occur if in contact with moisture or other materials which react with isocyanates. May occur at temperatures over 400 F (204 C).

**STABILITY:** Stable

**MATERIALS TO AVOID:** Excess heat and/or oxidizing materials. Avoid contact with water, alcohols, amines, strong bases, metal compounds, or surface active materials. In addition Chlorosulfonic acid.

If container is exposed to high heat, it can be pressurized and possibly rupture explosively. Isocyanates react slowly with water to form CO<sub>2</sub> gas. This gas can cause sealed containers to expand and possibly rupture explosively.

**HAZARDOUS DECOMPOSITION:** May decompose into fumes containing carbon monoxide, carbon dioxide, oxides of nitrogen, traces of HCN and HDI.

---

#### **SECTION VII - SPILL OR LEAK PROCEDURES**

**SMALL SPILL:** Absorb liquid on inert material such as paper, vermiculite, floor absorbent, and transfer to hood.

**LARGE SPILL:** Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area or spill until clean-up has been completed. Stop spill at source, contain area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be absorbed with inert materials such as sand, clay, earth, or floor absorbent, and shoveled into containers with non-sparking tools. Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify the proper authorities as required that a spill has occurred.

**WASTE DISPOSAL METHOD:** Allow volatile portion of evaporate in hood being sure to allow sufficient time for vapors to completely clear hood duct work. Dispose of contaminated absorbent, container and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers.

---

#### **SECTION VIII - PROTECTIVE EQUIPMENT**

**VENTILATION/RESPIRATORY PROTECTION** : Use only adequate ventilation. Maintain continuous flow of fresh air. Do not breathe vapors, spray mists, or sanding dusts. Wear appropriate, properly fitted respirator (NOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor, mist and particulate levels are below applicable limits. Follow respirator manufacturer's directions for respirator use. Engineering or administrative controls should be implemented to reduce exposure. Provide sufficient mechanical (general/local exhaust) ventilation to maintain exposure below TLV(s).

**PERSONAL PROTECTIVE EQUIPMENT:** Do not get in eyes, or skin, or on clothing. Use solvent resistant safety eyewear with splash guards. Contact lenses should not be worn. Solvent impermeable gloves, clothing, and boots are recommended to prevent skin contact. In addition a respirator that is recommended or approved for use in isocyanate containing environments should be used. A positive pressure air supplied respirator (TC 19C NIOSH/MSHA) is recommended.

---

#### **SECTION IX - SPECIAL PRECAUTIONS AND ADDITIONAL COMMENTS**

Keep closure tight and upright to prevent leakage. Keep container closed when not in use. Do not store above 120F. Do not transfer contents to bottles or other unlabeled containers.

Containers of this material may be hazardous when emptied because they retain product residues (vapor, liquid, and/or solid). All hazard precautions given in this data sheet must be observed.

**IMPORTANT!** This product must be blended with other products prior to use. Read all warnings and precautions on the labels of all products being blended as the combination may contain the hazards of each component.

**NON WARRANTY:** The information presented herein, while not guaranteed, is to the best of our knowledge true and accurate. Nor warranty or guarantee expressed or implied is made regarding the performance of any product since the manner of use is beyond our control. No suggestion for product use nor anything contained herein shall be construed as a recommendation for its use in infringement of any existing patent, and Munro assumes no responsibility or liability for operations that do infringe any such patents.

TUB REFINISHING, INC. DBA MUNRO PRODUCTS