MATERIAL SAFETY DATA SHEET

I. IDENTIFICATION

MANUFACTURED BY: Vogel Automotive Coatings
1020 Albany Place SE
Orange City, IA 51041

REVISED: 08/18/2006
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TRADE NAME: AXIS ACRYLIC URETHANE REDUCER - MEDIUM

MFG. PRODUCT NUMBER: AUR-06101

II. HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Chemical Name</th>
<th>WT %</th>
<th>Footnote</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1</td>
<td>Acetone</td>
<td>20-50</td>
<td>(1)</td>
</tr>
<tr>
<td>108-65-6</td>
<td>Propylene Glycol Methyl Ether Acetate</td>
<td>5-20</td>
<td>(1)</td>
</tr>
<tr>
<td>123-86-4</td>
<td>Butyl Acetate</td>
<td>5-20</td>
<td>(1)</td>
</tr>
<tr>
<td>110-19-0</td>
<td>Isobutyl Acetate</td>
<td>5-20</td>
<td>(1)</td>
</tr>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>5-20</td>
<td>(1)</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Xylene</td>
<td>5-20</td>
<td>(1)</td>
</tr>
<tr>
<td>64742-89-8</td>
<td>V M &amp; P</td>
<td>5-20</td>
<td>(1)</td>
</tr>
<tr>
<td>100-41-4</td>
<td>Ethyl Benzene</td>
<td>1-5</td>
<td></td>
</tr>
</tbody>
</table>

WARNING MESSAGES:

(1) 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. Chronic exposure may cause damage to the central nervous system, respiratory system, lung, eye, skin, liver, gastrointestinal tract, spleen, kidneys, and blood.

(2) See Section IX for reportable Hazardous Air Pollutants.

### III. PHYSICAL DATA

**BOILING RANGE:** 133-300° F

**EVAPORATION RATE:** * slower than ether *

**PERCENT VOLATILE BY VOLUME:** 100.00%  
**WEIGHT PER GALLON:** 6.88 LBS

**VAPOR DENSITY:** * heavier than air *

**ACTUAL VOC (lb/gal):** 4.24  
**EPA VOC (lb/gal):** 7.07  
**EPA VOC (g/L):** 847.27

### IV. FIRE AND EXPLOSION HAZARD DATA

**FLASH POINT:** -17° C 1° F  
**LEL:** Refer to Section II

**FLAMMABILITY CLASSIFICATION:** CLASS 1B

**HAZARD CLASSIFICATION:** *Flammable Liquid*

**EXTINGUISHING MEDIA:** *carbon dioxide, dry chemical, or fire foam*

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** With excessive heat, cans will rupture from internal pressure and discharge flammable contents. Vapors may ignite explosively. Keep away from heat, sparks and flame. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Prevent build up of vapors by opening all windows and doors to achieve cross-ventilation.

**SPECIAL FIREFIGHTING PROCEDURES:** Burning will produce toxic fumes. Wear self-contained breathing apparatus and full turn-out gear to fight fires. USE WATER WITH CAUTION. Material will float and may ignite on surface of water. Use water spray to keep fire exposed containers cool. Water may be ineffective in fighting the fire.

### V. HEALTH HAZARD DATA

**THRESHOLD LIMIT VALUE:** See Section II.

**EFFECTS OF OVEREXPOSURE:**
Acute- High vapor concentrations are irritating to the eyes and the respiratory tract, and may cause headaches, dizziness,
anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death. Product has a low order of acute oral and dermal toxicity, but minute amounts aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

Chronic- Xylene contains ethylbenzene which has been classified as a possible carcinogen to humans, Group 2B, by the International Agency for Research on Cancer (IARC), based on sufficient evidence in laboratory animals but inadequate evidence for cancer in humans. Prolonged or repeated overexposure to ethylbenzene may cause the following: kidney effects, liver effects, lung effects, thyroid effects, testicular effects, pituitary effects.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:**
   Eye disease, Skin disorders and Allergies

**PRIMARY ROUTE(S) OF ENTRY:** Eyes, Ingestion, Skin, Inhalation

**EMERGENCY AND FIRST AID PROCEDURES:**
**INHALATION:** Remove to fresh air. Restore breathing. Treat symptomatically. Consult a physician.
**EYES:** Flush immediately with large amounts of water for at least 15 minutes. Talk to a physician for medical treatment.
**SKIN:** Wipe off with towel. Wash with soap and water. Remove contaminated clothing.
**INGESTION:** If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by a medical personnel. Never give anything by mouth to an unconscious person.

**VI. REACTIVITY DATA**

**STABILITY:** *stable*          **HAZARDOUS POLYMERIZATION:** *will not occur*

**INCOMPATIBILITY:** oxidizing agents, halogens, strong reducing agents and strong bases.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Fire, burning and welding may generate carbon monoxide.

**CONDITIONS TO AVOID:** Fire, burning, and welding.

**VII. SPILL OR LEAK PROCEDURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**
Remove all sources of ignition (flames, hot surfaces and electrical, static or frictional sparks). Avoid breathing vapors. Ventilate area. Use non-sparking tools. Remove with inert absorbant.
WASTE DISPOSAL METHOD: Dispose of in accordance with local, state, and federal regulations.

VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
If air concentrations above the TLV are possible, wear a NIOSH/MSHA approved respirator.

VENTILATION: Provide general dilution or local exhaust ventilation in volume and pattern to keep TLV and LEL of most hazardous ingredient in Section II, below acceptable limit.

PROTECTIVE GLOVES: Permeation resistant gloves (butyl rubber, nitrile rubber) should be used. Cover as much of the exposed skin area as possible with appropriate clothing.

EYE PROTECTION:
Splash proof eye goggles. In emergency situations, use eye goggles with a full face shield.

OTHER PROTECTIVE EQUIPMENT: Protective clothing such as coveralls or lab coats must be worn.

HYGIENIC PRACTICES: See Section V

IX. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE:
Keep away from heat. Keep away from sparks, flames and other sources of ignition. Store in a cool, dry place. Keep container closed when not in use. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use with adequate ventilation. Ground and bond containers when transferring material. Use explosion proof equipment. Follow all MSDS/label precautions even after the container is emptied because it may retain product residues. Wash thoroughly after handling.

OTHER PRECAUTIONS: * none *

LIST OF HAZARDOUS AIR POLLUTANTS SUBJECT TO THE PROVISIONS OF THE CLEAN AIR ACT, TITLE I SECTION 112 'National Emission Standards for Hazardous Air Pollutants':

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>Wt% of HAPS in product</th>
<th>Pounds HAPS/Gal product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>9.5 %</td>
<td>0.7</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>5.2 %</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.1</td>
</tr>
<tr>
<td>--------------------------------</td>
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<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Ethyl Benzene</td>
<td>100-41-4</td>
<td>1.1 %</td>
<td></td>
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