

## M A T E R I A L   S A F E T Y   D A T A   S H E E T

## I. IDENTIFICATION

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

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**24 Hour Emergency Telephone**  
**CHEMTREC 1-800-424-9300**

General Information:  
Mon-Fri 8 AM - 5 PM  
712-737-4993

**TRADE NAME: AXIS ACRYLIC ENAMEL REDUCER MED.**

**MFG. PRODUCT NUMBER: AAR-05101**

## II. HAZARDOUS INGREDIENTS

CAS #108-88-3	Toluene	WT %: 20-50	Footnote: (1)
ACGIH TLV: 50 ppm TWA	ACGIH STEL:		
OSHA PEL: 200 ppm TWA	OSHA CEILING: 300 ppm	OSHA PEAK: 500 ppm	
VAPOR PRESSURE: 23.0 mm Hg	LEL%: 1.3		
CAS #64742-89-8	V M & P	WT %: 20-50	Footnote: (1)
ACGIH TLV: 300 ppm TWA	ACGIH STEL: 400 ppm		
OSHA PEL: 300 ppm TWA	OSHA CEILING:	OSHA PEAK:	
VAPOR PRESSURE: 10.2mmHg68F	LEL%: 0.9%		
CAS #111-76-2	Ethylene Glycol Butyl Ether	WT %: 5-20	Footnote: (1)
ACGIH TLV: 20 ppm TWA SKIN	ACGIH STEL:		
OSHA PEL: 50 PPM TWA SKIN	OSHA CEILING:	OSHA PEAK:	
VAPOR PRESSURE: 0.9 mm	LEL%: 1.1		
CAS #67-64-1	Acetone	WT %: 5-20	Footnote: (1)
ACGIH TLV: 500 ppm TWA	ACGIH STEL: 1000 ppm		
OSHA PEL: 1000 ppm TWA	OSHA CEILING:	OSHA PEAK:	
VAPOR PRESSURE: 185mm Hg60F	LEL%: 2.6%		
CAS #67-56-1	Methanol	WT %: 1-5	Footnote: (1)
ACGIH TLV: 200 ppm SKIN	ACGIH STEL: 250 ppm SKIN		
OSHA PEL: 200 ppm SKIN	OSHA CEILING:	OSHA PEAK:	
VAPOR PRESSURE: 92mmHg 20C	LEL%: 6.0%		
CAS #1330-20-7	Xylene	WT %: 1-5	Footnote: (1)
ACGIH TLV: 100 ppm TWA	ACGIH STEL: 150 ppm		
OSHA PEL: 100 ppm TWA	OSHA CEILING:	OSHA PEAK:	
VAPOR PRESSURE: 6.6mmHg@20C	LEL%: 1.0%		
CAS #100-41-4	Ethyl Benzene	WT %: 0.931	
ACGIH TLV: 100 ppm TWA	ACGIH STEL: 125 ppm		
OSHA PEL: 100 ppm TWA	OSHA CEILING:	OSHA PEAK:	
VAPOR PRESSURE:	LEL%:		

## 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: 133-340° F

EVAPORATION RATE: \* slower than ether \*

PERCENT VOLATILE BY VOLUME: 100.00%

WEIGHT PER GALLON: 6.82 LBS

VAPOR DENSITY: \* heavier than air \*

ACTUAL VOC (lb/gal): 5.86

EPA VOC (lb/gal): 6.85

EPA VOC (g/L): 820.90

**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 HAZARD: With excessive heat, cans will rupture from internal pressure and discharge flammable contents. Vapors may ignite explosively. Vapors may travel a considerable distance to a source of ignition and flash back. Keep away from heat, 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 FIRE FIGHTING PROCEDURES:

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

**V. HEALTH HAZARD DATA**

THRESHOLD LIMIT VALUE: See Section II.

EFFECTS OF OVEREXPOSURE:

Acute - Ingestion of methyl alcohol or inhalation of high levels of vapor are irritating to the respiratory tract, and may cause eye irritation, blurred vision, headache, weakness, drowsiness, lightheadedness, nausea, vomiting, anesthesia, unconsciousness, drunkenness, and other central nervous system effects, including

death. There is usually a latency period during which the acute symptoms may disappear, then relapse. Symptoms during the relapse include nausea, dizziness, and headache. Visual disturbances up to and including blindness almost always occur during the relapse. Liver toxicity may also occur. Methanol also acts as a defatting agent on the skin, which can result in dermatitis.

Minute amounts aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

Chronic - Chronic exposure to methanol can result in headache, dizziness, nausea, vomiting, weakness, vertigo, chills, unsteady gait, dermatitis, edema of the arms, gastric pain, insomnia, blurred vision, constricted visual fields, changes in color perception, double vision and blindness. Methanol has also been reported to cause shooting pains in the lower extremities and multiple neuritis, characterized by numbness and pricking on the skin, and shooting pain in the back of the hands and forearms. Sleep disturbances and digestive problems may also occur. Methanol is a defatting agent and can cause dermatitis.

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.

Target Organ Effects - Exposure to lethal concentrations of methanol has been shown to cause damage to organs including liver, kidneys, pancreas, heart, lungs, and brain. Although this rarely occurs, survivors of severe intoxication may suffer from permanent neurological damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals, and may aggravate pre-existing disorders of these organs in humans: central nervous system damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans, and may aggravate pre-existing disorders of these organs: visual impairment.

#### MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Alcoholism, acute and chronic liver and kidney disease, anemia, coronary disease or rhythm disorders of the heart, eye disease, skin disorders, and allergies.

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

## EMERGENCY AND FIRST AID PROCEDURES:

**Eye Contact:** If the chemical contacts the eyes, immediately wash the eyes with large amounts of room temperature water for at least 15 minutes, occasionally lifting the lower and upper lids. Get medical attention immediately. A follow up visit to an ophthalmologist should be made. Contact lenses should not be worn when working with this chemical.

**Skin Contact:** If this chemical contacts the skin, promptly wash the contaminated skin with soap and water for at least 15 minutes. If this chemical penetrates the clothing, promptly remove the clothing and wash the skin with soap and water. Systemic effects may be delayed by 18 to 72 hours, therefore keep individual under observation.

**Ingestion:** IF SWALLOWED, SEEK MEDICAL ATTENTION IMMEDIATELY! If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Poisonous if swallowed. Can affect the optic nerve resulting in blindness.

**Inhalation:** Remove to fresh air. If not breathing, administer CPR. If breathing is difficult, give oxygen. Call a physician.

**Note to Physicians:** This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis.

**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: Where contact is likely, wear rubber apron and boots. Eye wash station and safety shower should be available.

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. Do not store near strong oxidizing agents or strong acids. Keep container closed when not in use. This material may cause sensitization. Do not get in eyes, on skin or clothing. Do not allow contaminated clothing to contact skin. 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: Prevent eye and skin contact.

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':

Ingredient	CAS #	Wt% of HAPS in product	Pounds HAPS/ Gal product
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Toluene	108-88-3	37.8 %	2.6
Xylene	1330-20-7	4.3 %	0.3
Methanol	67-56-1	2.9 %	0.2

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