

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

REVISED: 05/04/2005
PRINTED: 05/01/2006

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

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

TRADE NAME: AXIS DIAMOND URETHANE CLEAR 1:1

MFG. PRODUCT NUMBER: ACL-16104

II. HAZARDOUS INGREDIENTS

CAS #123-86-4	Butyl Acetate	WT %: 20-50	Footnote: (1)
	ACGIH TLV: 150 ppm TWA	ACGIH STEL: 200 ppm	
	OSHA PEL: 150 ppm TWA	OSHA CEILING:	OSHA PEAK:
	VAPOR PRESSURE: 7.8mm Hg20C	LEL%: 1.7	
CAS #763-69-9	Ethyl 3-Ethoxypropionate	WT %: 5-20	Footnote: (1)
	ACGIH TLV:	ACGIH STEL:	
	OSHA PEL:	OSHA CEILING:	OSHA PEAK:
	VAPOR PRESSURE: 1.5mm Hg25C	LEL%: 1.05	
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 #108-88-3	Toluene	WT %: 5-20	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 #123-54-6	2,4 Pentane Dione	WT %: 1-5	Footnote: (1)
	ACGIH TLV: N.E.	ACGIH STEL:	
	OSHA PEL:	OSHA CEILING:	OSHA PEAK:
	VAPOR PRESSURE: 7mmHg20C	LEL%: 2.4	
CAS #110-43-0	Methyl Amyl Ketone	WT %: 1-5	Footnote: (1)
	ACGIH TLV: 50 PPM TWA	ACGIH STEL:	
	OSHA PEL: 100 ppm TWA	OSHA CEILING:	OSHA PEAK:
	VAPOR PRESSURE: 2.14 mm	LEL%: 1.1	
CAS #100-41-4	Ethyl Benzene	WT %: 0.173	
	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: 133-329° F

EVAPORATION RATE: * slower than ether *

PERCENT VOLATILE BY VOLUME: 57.13%

WEIGHT PER GALLON: 8.10 LBS

VAPOR DENSITY: * heavier than air *

ACTUAL VOC (lb/gal): 3.42

EPA VOC (lb/gal): 3.96

EPA VOC (g/L): 474.57

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. May be harmful by ingestion or skin absorption. May cause skin

irritation. Exposure can cause nausea and vomiting. Minute amounts aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death. May be neurotoxic, genotoxic with possible potential to produce heritable mutations, and developmentally toxic. Has been reported to cause contact dermatitis and contact urticaria in humans.

Chronic - This product 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: Wash mouth out with water and consult a physician. 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':

Ingredient	CAS #	Wt% of HAPS in product	Pounds HAPS/ Gal product
-----	-----	-----	-----
Toluene	108-88-3	5.5 %	0.4
