

MATERIAL SAFETY DATA SHEET

Matrix MCU Single Stage Urethane

SECTION I:

Manufacturer's Name: **Matrix System Automotive Finishes, Inc**
 Address: **850 Ladd Road, Bldg. E
 Walled Lake, MI 48390**
 Emergency Phone #: **Chemtrec (800) 424-9300,
 (800) 735-0303**
 Product: **Matrix MCU Single Stage Urethane – 2**
 D.O.T. Hazard Class **Paint, Flammable Liquids UN 1263**



PRIMARY HAZARD WARNING

Flammable. Keep away from heat, sparks, flames, and other sources of ignition. Do not smoke. Extinguish all flames and pilot lights. Turn off stoves, heaters, electrical motors, and other sources of ignition during use and until all vapors/odors are gone. Harmful if swallowed. Contains lead. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite, indigestion, nausea, vomiting, constipation, abdominal cramps, disturbance of rest and sleep, and weakness. Dried film of this product may be harmful if chewed or swallowed. May cause skin burns. Causes severe eye irritation. May be harmful if absorbed through the skin. Prolonged or repeated contact may cause an allergic skin reaction. Vapor and/or spray mist harmful if inhaled. Vapor irritates eyes, nose, and throat. Sanding and grinding dusts may be harmful if inhaled. THIS MATERIAL SAFETY DATA SHEET HAS BEEN PREPARED IN ACCORDANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200), THE SUPPLIER NOTIFICATION REQUIREMENTS OF SARA TITLE III, SECTION 313, AND OTHER APPLICABLE RIGHT-TO-KNOW REGULATIONS.

SECTION II - Hazardous Ingredients.

CODE No.	HAZARDOUS INGREDIENT	EMERG. PLAN*	NOTE	CAS No.	ACGIH TLV ppm	OSHA PEL ppm	STEL** ppm	HMIS H-F-R	FLASH POINT TCC/F	VAPOR PRESSURE mm Hg
1	ETHYL BENZENE	Yes		100-41-4	100	100	150	2*-3-0	77	7.10@68F
2	2-ETHYLHEXYL ACRYLATE	Yes		103-11-7						
3	TOLUENE	Yes	2	108-88-3	50	100	150	2*-3-0	45	47@20C
4	2,4-PENTANEDIONE	Yes		123-54-6						

MATERIAL SAFETY DATA SHEET

CODE No.	HAZARDOUS INGREDIENT	EMERG. PLAN*	NOTE	CAS No.	ACGIH TLV ppm	OSHA PEL ppm	STEL** ppm	HMIS H-F-R	FLASH POINT TCC/F	VAPOR PRESSURE mm Hg
5	N-BUTYL ACETATE	Yes		123-86-4	150	150	200	2*-3-0	81	10@20C
6	C.I. pg Red (LEAD MOLBDATE/CHROMATE/ SULFATE)	Yes		12656-85-8	0.05 mg/m3	0.012 mg/m3	N/A	2*-2-0	N/A	N/A
7	XYLENES	Yes	1	1330-20-7	100	100	150	2*-3-0	80	9.5@20C
8	TITANIUM DIOXIDE	No		13463-67-7	N/E	N/E	N/A	0-0-0	N/A	N/A
9	672NAPTHA	Yes		64742-89-8	300	300	N/E	1*-3-0	18	38@68F
10	AROMATIC HYDROCARBONS	NO		64742-95-6	50	50	150	1-3-0	110	4@68F
11	METHYL ETHYL KETONE	Yes	3	78-93-3	200	200	300	3-3-0	16	85@20c
12	STODDARD SOLVENT	NO		8052-41-3	525	525	525	N/A		N/A
13	1,2,4-TRIMETHYLBENZENE	Yes		95-83-6						

* Subject to the reporting requirements of section 313 of the Emergency Planning and Community right to know act of 1986 and 40CFR372.

** Short term exposure limit

Note 1 - Xylene contains 18-20% Ethyl Benzene (CAS# 100-41-4) having a PEL of 100 ppm, TLV of 100 ppm and a STEL of 150 ppm.

Note 2 - Toluene is known to the state of California to cause birth defects or other reproductive harm

Note 3- This raw material is known to the state of California to cause Cancer and adverse reproductive effects.

SECTION III - PHYSICAL DATA

Evaporation Rate: Faster than Butyl Acetate

Solubility in water: 2.8%

Boiling range: 172-417 F

Gallon weight (# per gal.): 9.462

Vapor Density: Heavier than air

Volume % volatile: 51-61

Weight % volatile: 46-67

V.O.C.(# per gal.): per formula

MATERIAL SAFETY DATA SHEET

SECTION IV - FIRE & EXPLOSION DATA

Flash point (Closed cup): 72

Approximate flammable limits: 1,5

Extinguishing media: Foam, carbon dioxide, dry chemical.

Special fire fighting procedures: Water spray may be ineffective. Water Spray may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable. Fire-Fighters should wear self-contained breathing apparatus and full protective clothing.

Unusual fire & explosion hazards: Keep this product away from heat, sparks and flame, and other sources of ignition. Invisible vapors can travel to a source of ignition and flash back. Do not smoke while using this product. Keep containers tightly closed when not in use. Closed containers may explode when overheated. Do not apply to hot surfaces. Toxic gases may form when this product comes in contact with extreme heat.

SECTION V - HEALTH HAZARD DATA

GENERAL EFFECTS

Ingestion: Gastro-intestinal distress. In the unlikely event of ingestion, call a physician immediately and have the names of the ingredients available. Contains lead. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite, indigestion, nausea, vomiting, constipation, abdominal cramps, disturbance of rest and sleep, and weakness. Dried film of this product may be harmful if chewed or swallowed.

Eye Contact: Causes severe eye irritation.

Skin Contact: May cause skin burns. May be harmful if absorbed through the skin. Prolonged or repeated contact may cause an allergic skin reaction.

Inhalation: Vapor and/or spray mist harmful if inhaled. Vapor irritates eyes, nose, and throat. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Avoid long-term and repeated contact. Overexposure to lead adversely affects blood and blood forming tissues, kidneys, liver and the central nervous system, reproductive organs and causes adverse developmental effects. NTP and IARC have classified chromium (+6) compounds as carcinogenic. No human data were available on the risk associated with use of strontium chromate or other chromate pigments. This product contains an insoluble form of a chromium (6+) compound. NTP and IARC associate these materials with an increased risk of cancer. This product contains titanium dioxide. Animals inhaling massive quantities of titanium dioxide dust in a long-term study developed lung tumors. Studies with humans involved in manufacture of this pigment indicate no increased risk of cancer from exposure. Potential for inhalation of titanium dioxide dusts from coatings is very limited. Since overexposures are not expected, there is no significant hazard for man. This product contains 2-ethyl hexyl acrylate which has caused skin cancer in laboratory animals after chronic skin painting studies. This product contains methyl ethyl ketone (MEK). MEK has been shown to cause minor embryotoxic/fetotoxic effects in laboratory animals exposed for prolonged periods at high concentrations via inhalation. The potential for human exposure to high concentrations is expected to be low due to the irritating effects of MEK at low concentrations. This product contains toluene. Toluene inhalation in animals (greater than 1500 ppm) and intentional inhalation of toluene-containing products by humans (e.g. glue) has caused adverse fetal development effects. This product contains 2,4-pentadione. Animals repeatedly inhaling high concentrations (up to 650 ppm) had the following toxic effects: decreased body weight, nasal lining thickening, anemia, brain/thymus degeneration and death (650 ppm level only). The low odor threshold, unpleasant odor and nauseating effects at levels of a few ppm should provide adequate warning to prevent overexposure in the work place. Ethylbenzene has been reported by NTP to cause cancer in laboratory animals following a chronic (2 year) inhalation exposure. Dose levels of 75, 250 and 750 ppm were used, with evidence of carcinogenicity found in the kidneys of rats and the lung and liver of mice at 750 ppm. The No Observed Effect Level (NOEL) was 75 ppm. The relevance of these findings to humans is uncertain, but appropriate safeguards should be employed to reduce or eliminate inhalation exposure to ethylbenzene. Contains lead. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite, indigestion, nausea, vomiting, constipation, abdominal cramps, disturbance of rest and sleep, and weakness. Dried film of this product may be harmful if chewed or swallowed. Eye watering, headaches, nausea, dizziness, and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact. **WARNING:** This product contains a chemical (s) known to the State of California to cause cancer and birth defects or other reproductive harm.

MATERIAL SAFETY DATA SHEET

SECTION VI – First Aid

INGESTION: If swallowed, induce vomiting by giving 1 ounce of syrup of ipecac followed by 8 to 16 ounces of water. Wipe out inside mouth to remove any residual material.

EYE CONTACT: In case of eye contact, remove contact lenses and flush eyes immediately with a gentle stream of luke warm water for at least 15 minutes.

SKIN CONTACT: In case of skin contact, flush immediately with plenty of water for at least 15 minutes, followed by waterless hand cleaner and soap and water if the material appears to adhere to skin.

INHALATION: If affected by inhalation of vapor or spray mist, remove to fresh air. Apply artificial respiration and other support measures as required.

OTHER: If ingest ion, any type of overexposure or symptoms of overexposure occur during or following the use of this product, contact a poison control center, emergency room or physician immediately; have Material Safety Data Sheet information available.

SECTION VII - REACTIVITY DATA

This product is normally stable but may undergo hazardous reactions at extremely high temperatures and pressures.

INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID): Avoid contact with strong alkalis, strong mineral acids, or strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: May produce the following hazardous decomposition products when exposed to extreme heat: carbon monoxide; carbon dioxide; oxides of aluminum; lower molecular weight polymer fractions; Extreme heat includes, but is not limited to, flame cutting, brazing, and welding. Hazardous Materials Identification System (HMIS) and National Fire Protection Association (NFPA) Ratings:

HMIS Rating	NFPA Rating		
	HEALTH	2*	HEALTH 2
	FLAMMABILITY	3	FLAMMABILITY 3
	REACTIVITY	0	INSTABILITY 0

Rating System: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe, *=Chronic Effects.

Safe handling of this product requires that all of the information on the MSDS be evaluated for specific work environments and conditions of use.

SECTION VIII - SPILL or LEAK PROCEDURES

Steps to be taken in case material is released or spilled: DO NOT breathe vapors. DO NOT get in eyes or on skin. Wear a positive pressure supplied air vapor/particulate respirator (NIOSH/MSHA TC-19C), eye protection, gloves and protective clothing. Remove sources of ignition. Provide maximum ventilation. Only personnel equipped with proper respiratory, skin and eye protection should be permitted in the area. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.

Waste disposal method Waste Material must be disposed of in accordance with federal, state, provincial and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility. DO NOT allow material to contaminate ground water systems. DO NOT incinerate in closed containers.

MATERIAL SAFETY DATA SHEET

SECTION IX - SPECIAL PROTECTION INFORMATION

Respiratory: DO NOT breathe vapors or mists. Over exposure to vapors may be prevented by ensuring proper ventilation controls, vapor exhaust or fresh air entry. A NIOSH approved air purifying respirator with the appropriate chemical cartridges or a positive pressure, air supplied respirator may also reduce exposure. Read the respirator manufacturers instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

Ventilation: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentration of ingredients listed in section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

Protective clothing: Wear protective clothing sufficient to cover exposed skin surfaces. For applications where skin contact is likely and impermeable clothing is necessary, select clothing constructed of: neoprene rubber or nitrile rubber. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based upon infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment.

Eye protection: Wear chemical-type splash goggles or full face shield when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapors.

Other: Clean contaminated clothing and shoes.

SECTION X - SPECIAL PRECAUTIONS

Precautions to be taken in handling and storing: Do not store above 120 degrees F. Store large quantities in buildings designed and protected for storage of NFPA Class IB Flammable liquids.

Other precautions: Vapors may collect in low areas. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) (MSDS) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts. Containers should be grounded when pouring. Avoid free fall of liquids in excess of a few inches. Do not apply on toys or other children's articles, furniture, or interior surfaces of any dwelling or facility. Do not apply on those exterior surfaces of any dwelling units, such as windowsills, porches, stairs, or railings to which children may be commonly exposed. Wash thoroughly before eating or smoking.

NOTICE: The data in this Material Safety Data Sheet relate only to the specific material designated herein and do not relate to use in combination with another material or in any process.

Revised on: July 15, 2009