MATERIAL SAFETY DATA SHEET

MSDS Number: MW62006 Revision Date: July 2006

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: TAMKO Metalworks Touch up Paint USE & DESCRIPTION: Touch up paint for metal shingles

CHEMICAL FAMILY: Acrylic Fluoropolymer

MANUFACTURED FOR: EMERGENCY TELEPHONE NUMBERS;

TAMKO Building Products, Inc. General Information: 1-904-284-7571 (8 a.m. - 5 p.m. EST)
P.O. Box 1404 1-620-429-1800 (8 a.m. - 5 p.m. CST)
Joplin, MO 64802-1404 1-417-624-6644 (8 a.m. - 5 p.m. CST)

Chemtrec: 1-800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

			Exposure Limits*					
Components	Components Cas No. % by Wt.		OSHA		ACGIH			
			TWA	STEL	TWA	STEL	Unit	
Toulene	108-88-3	10 – 30	100	150	50	N/A	ppm	
Ethyl Acetate	141-78-6	10 – 30	400	N/A	400	N/A	ppm	
Titanium Dioxide	7-13	7 – 13	10	N/A	10	N/A	mg/m³	
Ethyl Alcohol	64-17-5	1 – 5	1000	N/A	1000	N/A	ppm	
1-Methoxy-2-Propyl Acetate	108-65-6	10 – 30	100	N/A	50	N/A	ppm	

See Section 8 for additional relevant exposure limits

NA = Not Available

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

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. CAUSES EYE IRRITATION, MAY CAUSE SLIGHT SKIN IRRITATION. VAPOR AND / OR SPRAY MIST MAY BE HARMFUL IF INHALED. VAPOR IRRITATES EYES, NOSE AND THROAT. HARMFUL IF SWALLOWED.

HMIS Rating:	NFPA Rating:
Health - 2	Health - 2
Flammability - 3	Flammability - 3
Reactivity - 0	Reactivity - 0
•	·

Potential Health Effects

EYE CONTACT: Causes eye irritation. Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact.

SKIN CONTACT: May cause slight irritation. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

SKIN ABSORPTION: N/A

INGESTION: Harmful if swallowed

INHALATION: Vapor and / or spray mist may be harmful if inhaled. Vapor irritates eyes, nose and throat.

NOTE: Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. 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. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

CHRONIC EFFECT/CARCINOGENICITY/SPECIAL TOXIC EFFECTS

Avoid long-term and repeated contact. Repeated exposure to vapors above recommended exposure limits (see Section 8) may cause irritation of the respiratory system and permanent brain and nervous system damage. Intentional misuse by deliberately concentration and inhaling the contents can be harmful or fatal. 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. The effects of long-term, low level exposures to this product have been determined. Safe handling of this material on a long-term basis should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures. See Section 11, of this MSDS for a detailed list of chronic health effects information available on individual ingredients in this product.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable

4. FIRST AID MEASURES:

EYE CONTACT: Remove contact lens and pour a gentle stream of warm water through the affected eye for at least 15 minutes. If irritation persists, contact a poison control center, emergency room, or physician as further treatment may be necessary.

SKIN CONTACT: Run a gentle stream of water over the affected area for 15 minutes. A mild soap may by used if available. If any symptoms persist, contact a poison control center, emergency room, or physician as further treatment may be necessary.

INGESTION: Gently wipe or rinse the inside of the mouth with water. Sips of water may be given. Never give anything by mouth to an unconscious person. Contact a poison control center, emergency room or physician right away as further treatment may be necessary.

INHALATION: Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room, or physician for treatment information.

NOTES: IF INGESTION, IRRITATION, ANY TYPE OF OVEREXPOSURE OR SYMPTOMS OF OVEREXPOSURE OCCUR DURING OR PERSISTS AFTER USE OF THIS PRODUCT, CONTACT A POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN IMMEDIATELY. HAVE MATERIAL SAFETY DATA SHEET INFORMATIN AVAILABLE.

5. FIRE FIGHTING MEASURES

FLASH POINT (METHOD):

35° F (COC)

FLAMMABLE LIMITS (% VOLUME IN AIR - SOLVENT COMPONENT):

Lowe r= Upper =

AUTOIGNITION TEMPERATURE: Not Available

EXTINGUISHING MEDIA: Use NFPA Class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA Class 1B flammable liquid fires. Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible auto ignition or explosion when exposed to extreme heat.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE OR EXPLOSION HAZARDS: Keep this product away from heat, sparks, flame, and other sources of ignition (i.e. pilot lights, electric motors, static electricity). 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. Extreme heat includes, but is not limited to, flame cutting, brazing and welding.

6. ACCIDENTAL RELEASE MEASURES

PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED

Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. 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 absorbent should be placed in this container.

WASTE DISPOSAL METHODS: Dispose of in accordance with applicable Federal, State and Local regulations.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE:

Do not store above 120° F. Store large quantities in buildings designed and protected for storage of NFPA Class 1B flammable liquids.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Vapors may collect in low areas. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: Overexposure 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 manufacturer's 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.

EYE PROTECTION: Wear chemical-type splash goggles when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapors.

SKIN: Wear protective clothing to prevent skin contact. Apron and gloves should be constructed of: butyl rubber. No specific permeation/degradation testing has been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment. Clean contaminated clothing and shoes.

VENTILATION: Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listing (below) the lowest suggested exposure limits.

EXPOSURE GUIDELINES: Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 8 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

Additional potentially relevant exposure limits are listed below:

		Exposure Limits				
Components	CAS No.	OSHA		ACGIH		
		TWA	STEL	TWA	STEL	Unit
Toulene	108-88-3	100	150	50	N/A	ppm
Ethyl Acetate	141-78-6	400	N/A	400	N/A	ppm
Titanium Dioxide	7-13	10	N/A	10	N/A	mg/m³
Ethyl Alcohol	64-17-5	1000	N/A	1000	N/A	ppm
	1					

N/A = Not Available

Doc. No. 8945 5

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Viscous liquid with an odor characteristic of the solvents listed in Section 2.

BOILING POINT: 149 – 302 °F

Ph: N/A

MELTING POINT: N/A

SPECIFIC GRAVITY: 1.112

VAPOR PRESSURE (mm Hg): 30.7 mm Hg

VAPOR DENSITY (AIR = 1): Heavier than air.

% VOLATILE, BY VOLUME: 79.710

SOLUBILITY IN WATER: N/A

EVAPORATION RATE (BUTYL ACETAT = 1): 250

10. STABILITY AND REACTIVITY

STABILITY: This product is normally stable and will not undergo hazardous reactions.

CONDITIONS TO AVOID: None known

HAZARDOUS POLYMERIZATION: None known

INCOMPATIBILTY (MATERIALS TO AVOID): Avoid contact with strong alkalies, strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide – Carbon dioxide – Lower molecular weight polymer fractions.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity						
Material / CAS No.	%	ORAL LD50 (g/kg)	DERMAL LD50 (g/kg)	INHALATION LC50 (mg/l)		
1-Methoxy-2-PropyAcetate 108-65-6	10-30	8.53 g/kg	N/A	N/A		
Toluene 108-83-3	10-30	5.00 g/kg	12.12 g/kg	N/A		
Ethyl Acetate 141-78-6	10-30	5.62 g/kg	N/A	14.41 mg/L. 4h		
Ethyl Alcohol 64-17-5	1-5	7.06 g/kg	N/A	N/A		

Chronic Toxicity:

<u>Target organs</u> – Carcinogen, Embryotoxin, Reproductive, Teratogen, Brain, Central Nervous System and Lung.

<u>Mutagenicity</u> – This has not been tested for this product.

Reproductive – This has not been tested for this product.

12. ECOLOGICAL INFORMATION: N/A

13. DISPOSAL CONSIDERATIONS: Provide maximum ventilation, only personnel equipped with proper respiratory, skin and eye protection should be permitted in the area. Take up spilled material with sawdust, vermiculite, or other absorbent material and place in containers for disposal. Waste material must be disposed of in accordance with Federal, State, Provincial and Local Environmental control regulations. Empty containers should be recycled by an appropriately licensed reconditioner / salvager or disposed of through a permitted waste management facility.

14. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: Paint

DOT HAZARD CLASSIFICATION: 3

DOT LABELING REQUIREMENTS:

UN/NA NUMBER: UN 1263

PLACARDS: N/A

15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA): This product and/or all of its components are listed on the U.S. TSCA Inventory or is otherwise exempt from TSCA Inventory reporting requirements.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA)

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA), TITLE III

SECTION 311/312 HAZARD CATEGORIES:

Health (acute): Yes Health (chronic): Yes Fire (flammable): Yes

SECTION 313 REPORTABLE INGREDIENTS:

Chemical Name	CAS Number	Concentration (% by Wt.)
Toulene	108-88-3	10 - 30

CALIFORNIA PROPOSITION 65: WARNING! This product contains a chemical know to the State of California to cause birth defects or other reproductive harm.

16. OTHER INFORMATION:

Preparation Date: July 5, 2006

Replaces: None

Disclaimer of Liability

The information and recommendations contained herein are to the best of **TAMKO Building Products**' knowledge and belief, accurate and reliable as of the date issued. **TAMKO Building Products** does not warrant or guarantee their accuracy or reliability, and **TAMKO Building Products** shall not be liable for any loss or damage arising out of the use thereof.

The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use.