



Material Safety Data Sheet

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MACROPOXY® 646 Fast Cure Epoxy Coating

B58-646

CAS No.	— Section 2 — Hazardous Ingredients (percent by weight)	ACGIH TLV <STEL>	OSHA PEL <STEL>	Units	LD50 (Rat-Oral) mg/kg	LC50 (Rat) ppm/4hr.	Vapor Pressure mm	B58W610	B58T604	B58B600	B58R600	B58Y600	B58V600	R7K15
								Part A Mill White	Part A Ultradeep Tint Base	Part A Black	Part A Safety Red	Part A Safety Yellow	Part B Hardener	Reducer
64742-88-7	Mineral Spirits.	100	100	ppm	NAv	NAv	2.0	< 2% due to tinting						
108-65-6	1-Methoxy-2-Propanol Acetate	NAv	NAv		8500	NAv	1.8	< 5% due to tinting						
100-41-4	§ Ethylbenzene	100 <125>	100 <125>	ppm	3500	NAv	7.1	3	3	3	3	3	0.3	8
1330-20-7	§ Xylene.	100 <150>	100 <150>	ppm	4300	5000	5.9	14	15	17	17	16	2	44
108-10-1	§ Methyl Isobutyl Ketone.	50 <75>	50 <75>	ppm	2080	NAv	16.0						10	48
90-72-2	Tri(dimethylaminomethyl)phenol.	NAv	NAv		1200	NAv			1	1	1	1		
Proprietary	Epoxy Polymer.	NAv	NAv		NAv	NAv							27	
Proprietary	Polyamine.	NAv	NAv		NAv	NAv		10	13	12	13	12		
14808-60-7	Quartz	0.05	0.1	mg/m3 as Resp. Dust	NAv	NAv			0.2	38	0.2	0.2	58	
14807-96-6	Talc	2	2	mg/m3 as Resp. Dust	NAv	NAv		8	18		20	18		
13463-67-7	Titanium Dioxide.	10	10[5]	mg/m3 as Dust [Resp. Fraction]	NAv	NAv		35	0 - 4		3	11		
1333-86-4	Carbon Black.	3.5	3.5	mg/m3	NAv	NAv		0 - 2	0 - 2	4				
	Weight per Gallon (lbs.)							12.41	10.97	10.71	10.34	10.96	13.45	6.91
	Solids by Weight (%)							83.1	82.3	80.1	79.9	80.9	87.7	0.0
	Solids by Volume (%)							70.5	72.7	70.0	70.8	70.6	75.3	0.0
	VOC (Volatile Organic Compounds) - lbs./gal.							2.09	1.94	2.13	2.08	2.08	1.65	6.90
	Photochemically Reactive							Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Flash Point (°F)							85	73	85	100	100	73	64
	DOL Storage Category							1C	1C	1C	2	2	1C	1B
	Flammability Classification (Flammable - Combustible)							Flam.	Flam.	Flam.	Comb.	Comb.	Flam.	Flam.
	HMIS (NFPA) Rating (health - flammability - reactivity)							3* - 3 - 0	3* - 3 - 0	3* - 3 - 0	3* - 2 - 0	3* - 2 - 0	2* - 3 - 0	2* - 3 - 0

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§ Ingredient subject to the reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313, 40 CFR 372.65 C

→→→ MSDS Text Page Follows →→→

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Section 3 — Hazards Identification

ROUTES OF EXPOSURE - Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

EFFECTS OF OVEREXPOSURE - Irritation of eyes, skin and upper respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

SIGNS AND SYMPTOMS OF OVEREXPOSURE - Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists. Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE - May cause allergic skin reaction in susceptible persons or skin sensitization.

CANCER INFORMATION - For complete discussion of toxicology data refer to Section 11.

Section 4 — First Aid Measures

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water.

Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

If SWALLOWED: Do not induce vomiting. Get medical attention immediately.

Section 5 — Fire Fighting Measures

FLASH POINT	LEL	UEL
See TABLE	1.0	7.5

FLAMMABILITY CLASSIFICATION - See TABLE

EXTINGUISHING MEDIA - Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS - Closed containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

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.

Section 6 — Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED - Remove all sources of ignition. Ventilate the area. Remove with inert absorbent.

Section 7 — Handling and Storage

STORAGE CATEGORY - See TABLE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING - Keep away from heat, sparks, and open flame.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition. Consult NFPA Code. Use approved Bonding and Grounding procedures. Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

Section 8 — Exposure Controls/Personal Protection

PRECAUTIONS TO BE TAKEN IN USE - Use only with adequate ventilation. Do not get in eyes or on skin. Avoid breathing vapor and spray mist. Wash hands after using.

These coatings may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg./m³ (total dust), 3 mg./m³ (respirable fraction), OSHA PEL 15 mg./m³ (total dust), 5 mg./m³ (respirable fraction).

VENTILATION - Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION - If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES - Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION - Wear safety spectacles with unperforated sideshields.

OTHER PROTECTIVE EQUIPMENT - Use barrier cream on exposed skin.

OTHER PRECAUTIONS - These products must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Section 9 — Physical and Chemical Properties

PRODUCT WEIGHT	See TABLE	EVAPORATION RATE	Slower than ether
SPECIFIC GRAVITY	0.83 - 1.62	VAPOR DENSITY	Heavier than air
BOILING POINT	237 - 292 °F	MELTING POINT	Not Available
VOLATILE VOLUME	24 - 100 %	SOLUBILITY IN WATER	Not Available

Section 10 — Stability and Reactivity

STABILITY - Stable

CONDITIONS TO AVOID - None known.

INCOMPATIBILITY - None known.

HAZARDOUS DECOMPOSITION PRODUCTS - By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION - Will not occur

Section 11 — Toxicological Information

CHRONIC Health Hazards - Carbon Black is classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is insufficient evidence in humans for its carcinogenicity.

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary and reproductive systems.

Rats exposed to titanium dioxide dust at 250 mg./m³ developed lung cancer, however, such exposure levels are not attainable in the workplace.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Section 12 — Ecological Information

No data available.

Section 13 — Disposal Considerations

WASTE DISPOSAL METHOD - Waste from these products may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

Section 14 — Transport Information

No data available.

Section 15 — Regulatory Information

CALIFORNIA PROPOSITION 65 - WARNING: These products contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION - All chemicals in these products are listed, or are exempt from listing, on the TSCA Inventory.

Section 16 — Other Information

These products have been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

The above information pertains to these products as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to these products may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.