



Material Safety Data Sheet

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Date of preparation

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Motor Coach Basecoat System

MB

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	MB-LF (Pb) Non-Lead Colors	MB-LL (Pb) Lead Colors
	100-41-4	§ Ethylbenzene		100 <125>	100 <125>	ppm	3500	NAv	7.1	0.1 - 7
1330-20-7	§ Xylene.		100 <150>	100 <150>	ppm	4300	5000	5.9	6 - 35	6 - 35
111-76-2	§ 2-Butoxyethanol		20	20	ppm (skin)	470	NAv	0.9	0 - 2	0 - 2
67-64-1	Acetone.		500 <750>	1000	ppm	5800	NAv	180.0	6 - 7	6 - 7
110-43-0	Methyl n-Amyl Ketone.		50	100	ppm	1670	NAv	2.1	0.3 - 15	0.3 - 15
123-86-4	n-Butyl Acetate.		150 <200>	150 <200>	ppm	13100	2000	10.0	5 - 40	5 - 40
112-07-2	§ 2-Butoxyethyl Acetate.		NAv	NAv		2400	NAv	1.0	0 - 3	0 - 3
Proprietary	Coated Mica.		3	3	mg/m3 as Dust	NAv	NAv		0 - 23	0 - 23
13463-67-7	Titanium Dioxide.		10	10[5]	mg/m3 as Dust [Resp. Fraction]	NAv	NAv		0 - 35	0 - 35
1333-86-4	Carbon Black.		3.5	3.5	mg/m3	NAv	NAv		0 - 2	0 - 2
1344-37-2 12656-85-8	Lead Chromate Molybdate Orange		0.05	0.05	mg/m3	NAv	NAv			max 22
8007-18-9	Nickel Antimony Titanate		0.5	0.5	mg/m3	NAv	NAv		0 - 10	0 - 10
	§ Antimony compound [% Antimony] - maximum								10 [1.3]	10 [1.3]
	§ Chromium VI compound [% Chromium] - maximum									22 [3.3]
	§ Lead compound [% Lead] - maximum									22 [13.2]
	§ Nickel compound [% Nickel] - maximum								10 [0.4]	10 [0.4]
	Weight per Gallon (lbs.)								7.5 - 10.0	7.5 - 10.0
	VOC (Volatile Organic Compounds) Emitted - lbs./gal.								3.9 - 4.9	3.9 - 4.9
	VOC Less Water & Federally Exempt Solvents - lbs./gal.								4.1 - 5.0	4.1 - 5.0
	Photochemically Reactive								Yes	Yes
	Flash Point (°F)								73 - 80	73 - 80
	HMIS (NFPA) Rating (health - flammability - reactivity)								2* - 3 - 0	2* - 3 - 0
	PAINT-SAFE® Personal Protection								J3	J3

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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

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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. unconsciousness and possibly death.

Certain colors contain Lead (see product label). Acute occupational exposure to Lead is uncommon, but results in effects and symptoms similar to chronic overexposure described below.

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 - None generally recognized.

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	<i>LEL</i>	<i>UEL</i>
See TABLE	0.5	12.8

FLAMMABILITY CLASSIFICATION - RED LABEL -- Flammable, Flash below 100 °F

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 - DOL Storage Class IC

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING - Contents are FLAMMABLE. 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 -

Certain colors contain Lead (see product label). Before initial use of lead-containing colors, consult OSHA's Standard for Occupational Exposure to Lead (29 CFR 1910.1025).

Use only with adequate ventilation. Avoid contact with skin and eyes. 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, wirebrushing, abrading, burning or welding the dried film, wear a particulate respirator approved by NIOSH/MSHA for protection against non-volatile materials in Section 2.

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 PRECAUTIONS -

Certain colors contain Lead (see product label). Do not apply lead-containing colors on toys and other children's articles, furniture, or any interior surface of a dwelling or facility which may be occupied or used by children. Do not apply on any exterior surface of dwelling units, such as window sills, porches, stairs, or railings to which children may be commonly exposed.

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	0.90 - 1.20	VAPOR DENSITY	Heavier than air
BOILING POINT	132 - 384 °F	MELTING POINT	Not Available
VOLATILE VOLUME	70 - 80 %	SOLUBILITY IN WATER	Not Available

Section 10 — Stability and Reactivity

STABILITY - Stable

CONDITIONS TO AVOID - None known.

INCOMPATIBILITY - Metalics contain aluminum. Contamination with Water, Acids, or Alkalis can cause evolution of hydrogen, which may result in dangerously increased pressures in closed containers.

HAZARDOUS DECOMPOSITION PRODUCTS - By fire: Carbon Monoxide & Dioxide, Oxides of Metals in Section 2

HAZARDOUS POLYMERIZATION - Will not occur

Section 11 — Toxicological Information

CHRONIC HEALTH HAZARDS -

Certain colors contain Lead and Chromates (see product label) Chronic overexposure to Lead may result in damage to the blood-forming, nervous, urinary, and reproductive systems (including embryotoxic effects). Symptoms include abdominal discomfort or pain, constipation, loss of appetite, metallic taste, nausea, insomnia, nervous irritability, weakness, muscle and joint pains, headache and dizziness. Chromates are listed by IARC and NTP. Although studies have associated exposure to Chromium VI compounds with an increased risk of respiratory cancer, available evidence indicates that Lead Chromate (Chrome Yellow, Molybdate Orange) DOES NOT present this hazard.

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.

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.

Limited evidence exists linking certain Nickel compounds to cancer in animals and possibly humans, however no direct evidence exists that Nickel Antimony Titanate is carcinogenic.

Prolonged overexposure to solvent ingredients in the following products may cause adverse effects to the liver, urinary, blood forming, 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. Waste from products containing Lead or Chromium may also require extractability testing. 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.