



Material Safety Data Sheet

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ArmorCoat™ Clear Spray-On Paint Protection Bra

AC-2B

CAS No.	— Section 2 — Hazardous Ingredients (percentage by weight)	ACGIH TLV <STEL>	OSHA PEL <STEL>	Units	LD50 (Rat-Oral) mg/kg	LC50 (Rat) ppm/4hr	Vapor Pressure mm	Product - Finish - Color					
								Part A Polymer/Resins	Part B Activator/Catalyst				
123-86-4	n-Butyl Acetate	150 <200>	150 <200>	ppm	13100	2000	10.0	5 - 25	10 - 40				
108-10-1	Methyl Isobutyl Ketone	50 <75>	50 <75>	ppm	2080	NAv	NAv	5 - 25					
108-88-3	§ Toluene	50	100 <150>	ppm (skin)	5000	4000	22.0	1 - 7					
100-41-4	§ Ethylbenzene	100 <125>	100 <125>	ppm	3500	NAv	7.1	2 - 3					
1330-20-7	§ Xylene	100 <150>	100 <150>	ppm	4300	5000	5.9	8 - 15					
108-65-6	1-Methoxy-2-Propanol Acetate	Not Established					1.8	8 - 15					
123-54-6	2,4-Pentanedione	Not Established					7.0	1 - 8					
77-58-7	Dibutyltin Dilaurate	0.1 0.2	0.1	ppm (skin)				> 1					
Proprietary	Light Stabilizer	NAv	NAv		3125	NAv		1 - 5					
Proprietary	Polymer	NAv	NAv		4150	NAv		20 - 65					
28182-81-2	Hexamethylene Diisocyanate Polymer	0.5 C 1		mg/m3 Supplier Limit	NAv	NAv			60 - 80				
822-06-0	HMDI Monomer (max.)	0.005		ppm	738	NAv	0.05		0.1				
Proprietary	Isophorone Diisocyanate Polymer	NAv	NAv		4825	NAv			5 - 20				
	Weight per Gallon (lbs.)							8.38	8.68				
	VOC (Volatile Organic Compounds) Emitted - lbs./gal.							4.33	2.41				
	VOC Less Water & Federally Exempt Solvents - lbs./gal.VOC							4.33	2.41				
	Mixed VOC (Equal parts component A + B - Unreduced)							3.37 lbs/gal					
	Photochemically Reactive							Yes	Yes				
	Flash Point (°F)							60	84				
	HMIS (NFPA) Rating (health - flammability - reactivity)							2 - 3 - 0	2 - 3 - 0				
	DOL Storage Category / Flammability Classification (Flammable - Combustible)							1B / Flam	1B / Flam				

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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 →→→

AC-2B

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 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 - Hardener may cause allergic respiratory and/or skin reaction in susceptible persons or sensitization. This effect may be delayed several hours after exposure.

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

Section 4 — First Aid Measures

If INHALED: If any breathing problems occur during use, LEAVE THE AREA and get fresh air. If problems remain or occur later, IMMEDIATELY get medical attention.

If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing and laundry 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

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

FLASH POINT - See TABLE LEL 0.5 UEL 10.6

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 & possible autoignition/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.

If Hardener is spilled, Cover spill with absorbent material. Deactivate spilled material with a 10% ammonium hydroxide solution (household ammonia). After 10 minutes, collect in open containers and add more ammonia. Cover loosely. Wash spill area with soap and water.

Section 7 — Handling and Storage

STORAGE CATEGORY - See TABLE

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

NO PERSON SHOULD USE THESE PRODUCTS, OR BE IN THE AREA WHERE THESE PRODUCTS ARE BEING USED, IF THEY HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS OR IF THEY EVER HAD A REACTION TO ISOCYANATES.

Use all products 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 OSHA 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 - Where overspray is present, a positive pressure air supplied respirator (TC19C NIOSH/MSHA approved) should be worn. If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2 may be effective. Follow

respirator manufacturer's directions for use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. NO PERSONS SHOULD BE ALLOWED IN THE AREA WHERE THESE PRODUCTS ARE BEING USED UNLESS EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS.

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 recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION - Wear safety spectacles with unperforated sideshields.

OTHER PROTECTION - Wear barrier cream on exposed skin.

OTHER PRECAUTIONS

All products may 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	1.01 - 1.05	VAPOR DENSITY	Heavier than air
BOILING POINT	132 - 384 °F	MELTING POINT	Not Available
VOLATILE VOLUME	30 - 60 %	SOLUBILITY IN WATER	Not Available

Section 10 — Stability and Reactivity

STABILITY - Stable

CONDITIONS TO AVOID - None known.

INCOMPATIBILITY - Metallics may 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 Dioxide & Monoxide, Oxides of Metals in Section 2

HAZARDOUS POLYMERIZATION - Will not occur

Section 11 — Toxicological Information

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.

Persons sensitive to isocyanates will experience increased allergic reaction on repeated exposure.

Prolonged overexposure to solvent ingredients may cause adverse effects to the liver, urinary, blood forming, cardiovascular and reproductive systems.

Reports have linked repeated & prolonged solvent overexposure with permanent brain/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. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

Section 14 — Transport Information

ORMD LIMITED QUANTITY

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 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.