

**MATERIAL SAFETY DATA SHEET
BULK COATINGS
6/20/05**

PRODUCTS COVERED: BA-C, BF-B, BH-L, BP-B Parts A & B, BP-F, BP-W, BV-G, BZBA-C, BZBA-CB

SECTION I-MANUFACTURER

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SECTION II-PRODUCTS

<u>Stock Number</u>	<u>Product Name on Label</u>	<u>Numbers of Ingre- dients in Products</u>	<u>HMS RATING</u>			<u>Appearance and Odor</u>	<u>Solubility % in Water</u>	<u>Volatile Volume %</u>
			<u>H</u>	<u>F</u>	<u>R</u>			
BA-C	Auto Coat (Black)	17,18	2	3	0	Black gel, mild solvent	<1	65 to 75
BF-B	Flexible Bumper Coat	5,6,9,17	3	3	0	Black liq., strong solvent	1 to 10	80 to 85
BH-L	Ultra Flex	6,9,17	3	3	0	Clear liq., strong solvent	1 to 10	45 to 50
BP-B	Formula 21 Prima Bond Two-Part Epoxy Metal Bonding Primer	2,4,10,13,17,20	3	3	0	Black liq., strong solvent	<1	65 to 75
	Part A-Primer							
BP-B	Formula 21 Prima Bond Two-Part Metal Bonding Primer	3,4,7,8,16,20	2	3	0	Clear liq., mild solvent	<1	75 to 85
	Part B-Catalyst							
BP-F	Prima Flex Flexible Primer	1,6,9,14,17	3	3	0	Gray liq., strong solvent	1 to 10	65 to 70
BP-W	Prima Weld Weld-Thru Primer	4,19,20,21	3	3	0	Gray liq., strong solvent	<1	55 to 65
BV-G	Vinyl-Glo Vinyl Top Dressing	11,12	1	2	0	Tan liquid, mild solvent	<1	81 to 86
BZBA-C	Amber Coat	15	2	2	0	Beige liq., mild solvent	<1	22 to 35
BZBA-CB	Amber Coat (Black)	15	2	2	0	Black liq., mild solvent	<1	22 to 35

SECTION III-HAZARDOUS INGREDIENTS

<u>Ingredients</u>	<u>CAS Number</u>	<u>Exposure Limits*</u>	<u>Flash</u>		<u>Vapor Pres- sure (mm Hg</u>	<u>Evap. Rate</u>	<u>Boiling</u>	<u>Flammable</u>		<u>Autoigni- tion Pt.</u>		
		<u>In ppm (parts per million)</u>	<u>Point</u>	<u>at 20°C)</u>	<u>(n-Butyl Acetate=1)</u>	<u>Point</u>	<u>Limits in%</u>	<u>tion Pt.</u>				
			<u>°F</u>	<u>°C</u>			<u>°F</u>	<u>°C</u>	<u>Lowr</u>	<u>Uppr</u>		
1. n-Butyl Acetate	123-86-4	150 A, O	76	24	8	1.0	248	120	1.7	7.6	797	425
2. Carbon Black	1333-86-4	3.5mg/m ³ A, O	-NA-		NA	NA	-NA-		-NA-		-NA-	
3. Epoxy Catalyst System	Proprietary	Unknown	-NA-		NA	NA	-NA-		-NA-		-NA-	
4. Ethyl Benzene	100-41-4	100 A	59	15	7	0.5	277	136	1.0	6.7	810	432
5. Glycol Ether EP	2807-30-9	Unknown	120	49	1	0.2	301	149	-Unk		-Unk-	
6. Glycol Ether PM Acetate	108-65-6	NE	116	47	3.7	0.34	295	146	-Unk-		-Unk-	
7. Isopropanol	67-63-0	400 A, O	53	12	31	1.7	180	82	2.0	12.0	750	399
8. Light Aromatic Solvent Naphtha	64742-95-6	100 A	106	41	<10	0.2	306	152	0.9	7.0	880	471
9. Methyl Ethyl Ketone	78-93-3	200 A, O	16	-9	85	4.6	174	79	1.8	10.0	759	404
10. Methyl Isobutyl Ketone	108-10-1	50 A, 100 O	60	16	16	1.6	237	114	1.4	7.5	854	457
11. Mineral Spirits 66/3	64742-47-8	300 E	100	38	<10	<0.1	302	150	0.6	7.0	450	232
12. Mineral Spirits	64742-88-7	100 A, 500 O	106	41	<10	0.1	302	150	0.6	7.0	450	232
13. Modified Epoxy Primer	Proprietary	Unknown	-NA-		NA	NA	-NA-		-NA-		-NA-	
14. Silica, Crystalline (Quartz)	14808-60-7	0.1 mg/m ³ RD	-NA-		NA	NA	-NA-		-NA-		-NA-	
15. Stoddard Solvent	8052-41-3	100 A, 500 O	104	40	3	0.2	318	159	0.7	6.0	>394	>201
16. Tetraethylenepentamine	112-57-2	Unknown	325	163	<0.01	<0.1	645	340	0.8	4.6	610	321
17. Toluene	108-88-3	50 A (Skin) 200 O	45	7	38	1.5	230	110	1.2	7.0	900	482
18. VM&P Naphtha 66/3	64742-47-8	300 A	45	7	40	2.0	233	112	0.9	7.0	480	249
19. VM&P Naphtha 66/3	64742-89-8	300 A	45	7	40	2.0	233	112	0.9	7.0	480	249
20. Xylene	1330-20-7	100 A, O	80	27	10	0.8	281	138	1.0	7.0	810	432
21. Zinc Dust	7440-66-6	5 A, 15 O mg/m ³ RD	-NA-		NA	NA	-NA-		-NA-		-NA-	

*A means ACGIH TLV, O means OSHA PEL. Other abbreviations: E means Suppliers Number, > means greater than, < means less than, Unk means Unknown, NE means Not Established, NA means Not Applicable, RD means Respirable Dust.

SECTION IV-PHYSICAL DATA

Evaporation Rate: See SECTIONS II, III **Vapor Density:** Heavier than air **Solubility in Water (Wt%):** See SECTION II **Volatile Volume %:** See SECTION II **Approximate Boiling Point:** See SECTIONS II, III **Product Density (water=1):** Less than 1 (BP-F, BP-B Part A & BP-W Greater than 1). **Ingredient Density:** Less than 1 (21 > 1 and 3, 13 unknown). **Appearance and Odor:** See SECTION II

SECTION V-FIRE AND EXPLOSION DATA

Flammability Class: Flammable (BV-G, BZBA-C & BZBA-CB are Combustible.)

Flash Point (Tag Closed Cup Method): See SECTIONS II, III

Approximate Flammable Limits: See SECTIONS II, III

Autoignition Temperature: See SECTIONS II, III

Extinguishing Media: Foam, carbon dioxide, dry chemical

Special Fire Fighting Procedures: Full protective equipment, including self-contained breathing apparatus, is recommended because highly toxic gasses may be generated by combustion or thermal decomposition. Water from fog nozzles may be used to cool closed containers to prevent pressure build up (containers may leak or burst when heated).

Unusual Fire and Explosion Hazards: Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, electric motors, smoking or other ignition sources at locations far from material handling point. At elevated temperatures [130°F (54°C) or over] containers may vent, rupture or burst.

SECTION VI-HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE: Inhalation, Skin contact, Eye contact.

SIGNS AND SYMPTOMS OF EXPOSURE:**INHALATION:**

Acute Exposure: Solvent vapors at concentrations above the TLV can irritate the respiratory tract (nose, throat, lungs) causing a burning sensation, runny nose, sore throat, coughing, chest discomfort (tightness). May cause central nervous system depression with the following progressive symptoms: headache, dizziness, nausea, staggering gait, confusion, unconsciousness, cessation of breathing and death.

Chronic Exposure: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Symptoms include loss of memory, intellectual ability and coordination.

NOTE: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING ANY SOLVENT VAPORS MAY BE HARMFUL OR FATAL!

SKIN CONTACT:

Acute Exposure: Repeated or prolonged skin contact with solvents can result in dry, defatted and cracked skin causing increased susceptibility to infection. Skin irritation may develop into contact dermatitis.

Chronic Exposure: Exposure to small amounts of solvent over long periods of time may cause some or all of the symptoms as in acute exposure to solvents.

EYE CONTACT:

Acute Exposure: Irritation of the eyes with itching, burning, redness and even permanent tissue damage if gotten directly into the eyes and not flushed out immediately.

Chronic Exposure: Irritation of the eyes with itching, burning, redness.

INGESTION:

Acute Exposure: Irritation to the mouth and, if swallowed, to the esophagus, stomach tissue and digestive tract. If swallowed, vomiting may cause breathing of liquid solvent resulting in chemical pneumonia.

Chronic Exposure: Unknown.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: (See NOTES) None specifically known to Crest Industries, Inc. but it is possible that eye, respiratory tract, skin, liver, kidney, blood cell formation, nervous system and brain diseases may be aggravated by overexposure to the products on this MSDS.

CARCINOGENICITY: Products not listed by NTP, IARC or OSHA.

SECTION VII-EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Move to an area free from risk of further exposure. Administer oxygen or artificial respiration as needed. Obtain medical attention.

EYE CONTACT: Flush with clean, lukewarm water (low pressure) for at least 15 minutes while lifting eyelids. Refer person to physician for immediate attention.

SKIN CONTACT: Remove contaminated clothing immediately. Clean affected areas thoroughly with waterless skin cleaner and/or soap and water. Wash contaminated clothing thoroughly before reuse. Seek medical attention if irritation develops or persists.

INGESTION: DO NOT INDUCE VOMITING! Consult physician, hospital emergency room or poison control center immediately. Have list of ingredients available.

NOTES TO PHYSICIAN:

Inhalation: Treat as for solvent vapor inhalation. Bronchodilators, expectorants and antitussives may help.

Eyes: May cause conjunctivitis. Stain for evidence of corneal injury.

Skin: Treat as any contact dermatitis.

Ingestion: Treat as for solvent ingestion. Inducing vomiting is contraindicated because of the possibility of chemical pneumonia caused by aspiration of solvent liquid.

SECTION VIII-EMPLOYEE PROTECTION RECOMMENDATIONS

EYE PROTECTION: Wear safety glasses, splash goggles or face shield. Contact lenses should not be worn.

SKIN PROTECTION: Cover as much of the skin as possible with appropriate clothing. Wear solvent resistant gloves.

VENTILATION AND RESPIRATORY PROTECTION: If exhaust ventilation sufficient to keep the airborne concentrations of solvents below their respective TLV's is not possible, an OSHA/MSHA approved TC23C Paint Spray Respirator with Particulate Prefilter or TC19C Air Supplied Respirator must be used. A dust mask must be worn when sanding or grinding is done on the dry coatings. **A dust mask does not protect against vapors!** Observe OSHA regulations (29 CFR 1910.134) for respirator use. **NOTE: THERE MUST ALWAYS BE ENOUGH VENTILATION TO KEEP VAPOR CONCENTRATION BELOW THE LOWER FLAMMABLE LIMIT!**

OTHER PROTECTIVE MEASURES: Eyewash stations should be available. Educate and train employees in safe use of products. Follow all label instructions.

SECTION IX-REACTIVITY DATA

STABILITY: Stable under normal room conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY (Materials to Avoid): Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: By high heat and fire: carbon dioxide, carbon monoxide, hydrocarbon fumes, smoke.

SECTION X-SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Put on protective equipment including respiratory protection. Prevent further spillage. Evacuate nonessential personnel. Remove all sources of ignition and ventilate the area. Keep spill from reaching sewers and waterways. Cover the spill with sawdust, vermiculite, Fuller's Earth or other absorbent material. Collect material with non-sparking tools and put in a tightly sealed container. Remove container to a safe place.

WASTE DISPOSAL METHOD: Follow all federal, state and local environmental control regulations. Incineration of the liquid or dried material is the preferred method.

RCRA STATUS: Since these products are ignitable and toxic, they are hazardous when discarded.

SECTION XI-SPECIAL PRECAUTIONS & STORAGE DATA

STORAGE TEMPERATURE MINIMUM / MAXIMUM:

50°F (10°C) / 120°F (49°C)

RECOMMENDED SHELF LIFE: One year

PRECAUTIONS TO BE TAKEN IN HANDLING, STORAGE AND USE: Keep away from heat, sparks and open flame. Do not store in temperatures above 120°F (49°C) or in direct sunlight. Do not inhale vapors. Avoid contact with skin and eyes. Wash hands after use and before eating, drinking, smoking or using the toilet. Employee education and training in the safe use and handling of these materials are required under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

KEEP OUT OF THE REACH OF CHILDREN!

SECTION XII-EPA INFORMATION**The following percentage table is to be used to meet Environmental Protection Agency (EPA) Regulations:**

- 40 CFR Part 370 Emergency and Hazardous Chemical Inventory Forms and Community Right-to-Know Reporting Requirements.
- Title III Section 313 Toxic Chemical Release Reporting Requirements. **Note:** All the Chemicals listed must be considered for 1. above. Only the chemicals marked with an asterisk (*) fall under 2.

HAZARDOUS INGREDIENTS IN BULK COATINGS—APPROXIMATE PERCENTAGES BY WEIGHT

Ingredients (Chemicals)	CAS Number	BAC	BFB	BHL	BP-B	BP-B	BPF	BPW	BVG	BZBAC
					Part A	Part B				BZBACB
1. n-Butyl Acetate	123-86-4	—	—	08	—	—	08	—	—	—
2. Carbon Black	1333-86-4	—	—	—	02	—	—	—	—	—
3. Epoxy Catalyst System	Proprietary	—	—	—	—	10-20	—	—	—	—
4. Ethyl Benzene	100-41-4	—	—	—	03	12	—	02	—	—
5. Glycol Ether EP	2807-30-9	—	03	—	—	—	—	—	—	—
6. Glycol Ether PM Acetate	108-65-6	—	03	03	—	—	04	—	—	—
7. Isopropanol	67-63-0	—	—	—	—	2-7	—	—	—	—
8. Light Aromatic Solvent Naphtha	64742-95-6	—	—	—	—	1-5	—	—	—	—
*9. Methyl Ethyl Ketone	78-93-3	—	03	22	—	—	12	—	—	—
10. Methyl Isobutyl Ketone	108-10-1	—	—	—	16	—	—	—	—	—
11. Mineral Spirits 66/3	64742-47-8	—	—	—	—	—	—	—	64	—
12. Mineral Spirits	64742-88-7	—	—	—	—	—	—	—	16	—
13. Modified Epoxy Primer	Proprietary	—	—	—	34	—	—	—	—	—
14. Silica, Crystalline (Quartz)	14808-60-7	<1	—	—	—	—	35	—	—	—
15. Stoddard Solvent	8052-41-3	—	—	—	—	—	—	—	—	25
16. Tetraethylenepentamine	112-57-2	—	—	—	—	1-5	—	—	—	—
*17. Toluene	108-88-3	12	66	09	29	—	28	—	—	—
18. VM&P Naphtha 66/3	64742-47-8	38	—	—	—	—	—	—	—	—
19. VM&P Naphtha 66/3	64742-89-8	—	—	—	—	—	—	03	—	—
*20. Xylene	1330-20-7	—	—	—	16-20	67	—	15	—	—
21. Zinc Dust	7440-66-6	—	—	—	—	—	—	73	—	—

Ingredients (Chemicals)	CAS Number	BAC	BFB	BHL	BP-B	BP-B	BPF	BPW	BVG	BZBAC			
					Part A	Part B				BZBACB			
Physical Hazard-Fire		50	75	42	66	87	52	20	80	25			
Physical Hazard-Pressure Release				N	O	T	A	H	A	Z	A	R	D
Health Hazard-Acute		50	75	42	100	100	87	93	80	25			
Health Hazard-Chronic		12	66	09	—	—	63	—	—	—			
Physical Hazard-Reactivity				N	O	T	A	H	A	Z	A	R	D

SECTION XIII-VOLATILE ORGANIC COMPOUND (V.O.C.) CONTENT ACCORDING TO THE FEDERAL EPA

	BAC	BFB	BHL	BP-B Part A	BP-B Part B	BPF	BPW	BVG	BZBAC	BZBACB
Percent by Weight	51	75	42	66.0	87.0	52	20	82	25	25
Pounds per Gallon	4.8	5.9	3.4	5.37	6.37	5.1	4.1	5.6	1.8	1.8
Grams per Liter	575	710	410	653	766	610	494	1150	219	219
Pounds per Container	—	—	0.43	0.671	0.796	—	0.26	1.4	1.8	1.8

SECTION XIV-CALIFORNIA PROPOSITION 65 WARNINGS

According to the California Safe Drinking Water and Toxic Enforcement Act (PROPOSITION 65) "No person in the course of doing business shall knowingly and intentionally expose any individual to a chemical known to the state of California to cause cancer, birth defects or reproductive toxicity without first giving clear and reasonable warning to such individuals of such an exposure". The following warnings apply:

- Toluene containing products: **BFB, BHL, BP-B Part A, BP-F**

WARNING: This product contains a chemical known to the state of California to cause birth defects and other reproductive harm.

- Combination of Silica, Crystalline (Quartz) with Toluene: **BAC, BPF**

WARNING: These products contain chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

SECTION XV-OZONE DEPLETION IN THE UPPER ATMOSPHERE

None of the products on this MSDS contains Upper Atmosphere ozone depleting substances.

DISCLAIMER: The information contained in this MSDS is believed to be accurate and reliable as of the date indicated. **Crest Industries, Inc.** assumes no legal responsibility and makes no representation, warranty or guarantee, expressed or implied, as to the completeness or accuracy of the information. It is offered solely for your consideration, investigation and verification. The user is ultimately responsible for the safe use of the material in accordance with applicable federal, state, provincial and local laws and regulations.