MATERIAL SAFETY DATA SHEET

AEROSOL BUMPER AND TRIM COATS

10/01/12

PRODUCTS COVERED: BUMPER COATS: AF-1, AF-2 **TRIM COATS:** AT-1, AT-2, AT-3

SECTION I–MANUFACTURER

Crest Industries, Inc., 1337 King Road, Trenton, MI 48183 **Phone:** (734) 479-4141 **FAX:** (734) 479-4040

24 HOUR EMERGENCY TELEPHONE (CHEMTEL): (800) 255-3924 **INTERNATIONAL CALLS:** (813) 248-0585

SECTION II–PRODUCTS

Stock Number	Product Name on Label	HMIS Numbers of Ingredients in Products	RATING H	F	R	Appearance and Solvent Odor	Solubility % in Water	Volatile Volume %
AF-1	Bumper Coat, Gloss Black	1,4,9,10,11,13,14	2	4	0	Black liquid, strong	Negligible	92-94
AF-2	Bumper Coat, Satin Black	1,2,4,8,10,12,14	2	4	0	Black liquid, strong	Negligible	91-93
AT-1	Trim Coat, Gloss Black	1,2,3,4,7,9,10,12,14	2	4	0	Black liquid, strong	Negligible	90-94
AT-2	Trim Coat, Satin Black	1,2,3,4,5,6,9,12,14	2	4	0	Black liquid, strong	Negligible	80-90
AT-3	Trim Coat, Super Gloss Black	1,6,7,10,13,14	2	4	0	Black liquid, strong	Negligible	92-94

SECTION III–HAZARDOUS INGREDIENTS

Ingredients	CAS Number	Exposure Limits* in ppm (parts per million)	Flash Point °F	°C	Vapor Pressure (mm Hg at 20°C)	Evap. Rate (n-Butyl Acetate=1)	Boiling Point °F	°C	Flammable Limits in % Lower	Upper	Autoignition Pt. °F	°C
1. Acetone	67-64-1	500 A, 1000 O	-4	-20	185	7.7	132	56	2.6	12.8	869	465
2. Butane (n-Butane)	106-97-8	1000 A, 800 N	<-40		>1500	114	31	-1	1.8	8.4	860	460
3. n-Butyl Acetate	123-86-4	150 A, O	76	24	8	1.0	248	120	1.7	7.6	797	425
4. Carbon Black	1333-86-4	3.5mg/m^3 A, O	-NA-		-NA-	-NA-	-NA-		-NA-		-NA-	
5. EB Acetate	112-07-2	NE	165	74	.2	.04	377	192	.5	8.5	644	340
6. Ethyl Acetate	141-78-6	400 A, O	24	-4	76	4.1	169	76	2.2	11.0	800	427
7. Ethyl-3-ethoxy-propionate	763-69-9	50 A, O	136	58	1.11	0.12	320	163	1.05	12.1	Unknown	
8. Ethylene Glycol Monopropyl Ether	2807-30-9	NE	120	49	1	0.2	301	149	Unknown		Unknown	
9. Methoxy-2-Propanol Acetate	108-65-6	NE	116	47	4	0.34	295	146	Unknown		Unknown	
10. Methyl Ethyl Ketone	78-93-3	200 A, O	16	-9	85	4.6	174	79	1.8	10.0	759	404
11. Methyl Isobutyl Ketone	108-10-1	50 A, 100 O	60	16	16	1.6	237	114	1.2	Unk	854	457
12. Propane	74-98-6	1000 A. O	<-40	<-40	>6000	390	-45	-43	2.1	9.5	842	450
13. Propane/Butane Blend	68476-85-7, 68476-86-8	1000 A, O	<-40	<-40	>6000	390	-45	-43	2.1	9.5	842	450
14. Toluene	108-88-3	50 A Skin, 200 O	45	7	38	1.5	230	110	1.2	7.0	896	480

*A means ACGIH TLV, O means OSHA PEL. Other abbreviations: >means greater than, < means less than, NA means Not Applicable, NE means Not Established, resp. frac. means respirable fraction. Skin means vapor exposure to the skin must also be considered. **See NOTES in SECTIONS VI & VIII.**

SECTION IV–PHYSICAL DATA

Pressure of Can Contents: Maximum pressure less than 140 PSI GAUGE at 130°F (54°C). **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 Specific Gravity:** 0.7 - 0.8 **Appearance and Odor:** See SECTION II.

SECTION V–FIRE AND EXPLOSION DATA

Flammability Class: Extremely Flammable Aerosol
Flash Point (Tag Closed Cup Method): <0°F (-18°C)
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, loss of intellectual ability and loss of 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 sprayed directly into the eyes and not flushed out immediately. **Chronic Exposure:** Irritation of the eyes with itching, burning, redness.
INGESTION: Acute Exposure: (Not likely unless deliberately sprayed into mouth.) 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: Chronic Exposure: Unknown. **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** 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 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: Desirable during use of aerosol products. 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 and propellants 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 vapors, smoke. **WASTE DISPOSAL METHOD:** Follow all federal, state and local environmental control regulations. Incineration of the liquid or dried material is the preferred method. **DO NOT PUT AEROSOL CONTAINERS IN A HOME TRASH COMPACTOR! DO NOT INCINERATE (OR BURN) AEROSOL CONTAINERS EVEN WHEN EMPTY!** Containers may become pressurized **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)

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 or spray mist. 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)

SECTION XII–FEDERAL EPA REGULATION COMPLIANCE INFORMATION–EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT of 1986

1) Section 313 Supplier Notification: Chemicals marked with an * in the following tables are subject to the Toxic Chemical Release Inventory Reporting Requirements using EPA FORM R (40 CFR Part 372). **2) Section 312:** All the chemicals listed are subject to Emergency and Hazardous Chemical Inventory Forms and Community Right-to-Know Reporting Requirements: Tier I and Tier II Reports (40 CFR Part 370). **NOTE:** This information must be included in all MSDSs that are copied and distributed for materials covered by this MSDS

KEEP OUT OF THE REACH OF CHILDREN

HAZARDOUS INGREDIENTS IN AEROSOL BUMPER & TRIM COATS—APPROXIMATE PERCENTAGES BY WEIGHT

Ingredients (Chemicals)	CAS Number	AF1	AF2	AT1	AT2	AT3
*1. Acetone	67-64-1	13-30	25-30	25-30	40-51	30-35
2. Butane (n-Butane)	106-97-8	—	12-14	12-15	5-8	—
3. n-Butyl Acetate	123-86-4	—	—	2	3-5	—
4. Carbon Black	1333-86-4	1-2	1-3	2	0.1-1	—
5. EB Acetate	112-07-2	—	—	—	1-3	—
6. Ethyl Acetate	141-78-6	—	—	—	8-10	2-10
7. Ethyl-3-ethoxy propionate	763-69-9	—	—	5-7	—	1-2
8. Ethylene Glycol Monopropyl Ether	2807-30-9	—	1	—	—	—
9. Methoxy-2-Propanol Acetate	108-65-6	—	—	2	1-3	—
10. Methyl Ethyl Ketone	78-93-3	5-7	1-4	3	—	2-10
11. Methyl Isobutyl Ketone	108-10-1	1-5	—	—	—	—
12. Propane	74-98-6	—	12-15	12-15	15-21	—
13. Propane/Butane Blend	68476-86-8, 68476-85-7	13-30	—	—	—	10-25
*14. Toluene	108-88-3	5-7	25-30	12-15	1-3	10-25
VOC Content (% by wt.)		65.7	60.0	63.9	42.73	62.8

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". **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 contain Upper Atmosphere ozone depleting substances.