

**MATERIAL SAFETY DATA SHEET
AEROSOL ENGINE PAINTS
6/17/05**

PRODUCTS COVERED: AM-1, AM-2, AM-4, AM-11, AM-12, AM-14, AM-16

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

<u>Stock No.</u>	<u>Product Name on Label</u>	<u>Numbers of Ingredients in Products</u>	<u>HMIS RATING</u>			<u>Appearance and Odor</u>	<u>Solubility Weight % in Water</u>	<u>Volatile Volume%</u>
			<u>H</u>	<u>F</u>	<u>R</u>			
AM-1	Engine Enamel, Gloss Black	1,2,6,11,15,20,21	3	4	0	Black liq., strong solvent	41 - 61	85 - 90
AM-2	Engine Enamel, Flat Black	1,8,10,12,18,22	3	4	0	Black liq., strong solvent	41 - 61	85 - 90
AM-4	Engine Enamel, Clear	1,8,10,12,18,22	3	4	0	Clear liq., strong solvent	48 - 58	90 - 95
AM-11	Truck Color, Chevy-GMC White	1,3,4,7,9,11,13,14,16,17,18	3	4	0	White liq., strong solvent	50 - 55	85 - 90
AM-12	Engine Enamel, Semi-Gloss Black	1,8,10,12,18,22	3	4	0	Black liq., strong solvent	41 - 61	85 - 90
AM-14	Spray Lacquer, Flat Black	1,6,9,15,19,20,22	3	4	0	Black liq., strong solvent	40 - 50	82 - 86
AM-16	Truck Color, Dull Aluminum	1,3,4,5,7,9,11,13,14,16,17,18	3	4	0	Silver liq., strong solvent	50 - 55	85 - 90

SECTION III—HAZARDOUS INGREDIENTS

<u>Ingredients</u>	<u>CAS Number</u>	<u>Exposure Limits* in ppm (parts per million)</u>	<u>Flash Point °F °C</u>	<u>Vapor Pres- sure (mm Hg at 20°C)</u>	<u>Evap. Rate (n-Butyl Acetate=1)</u>	<u>Boiling Point °F °C</u>		<u>Flammable Limits in% Lowr Uprr</u>		<u>Autoign- nition Pt. °F °C</u>
						<u>°F</u>	<u>°C</u>	<u>Lowr</u>	<u>Uprr</u>	
1. Acetone	67-64-1	750 A, O	-4 -20	185	7.7	132	56	2.6	12.8	869 465
2. Aromatic Hydrocarbon	64742-95-6	100 A	Unk	3	<1	-Unk-	-Unk-	-Unk-	-Unk-	-Unk-
3. n-Butane	106-97-8	1000 A, 800 N	<-40	>1500	114	31	-0.5	1.8	8.4	860 460
4. n-Butyl Acetate	123-86-4	150 A, O	76 24	8	1.0	248	120	1.7	7.6	797 425
5. n-Butyl Alcohol	71-36-3	20 A, 100 O	99 37	5	0.46	244	118	1.4	11.2	649 343
6. Carbon Black	1333-86-4	3.5 mg/m ³ Dust	-NA-	NA	NA	-NA-	-NA-	-NA-	-NA-	-NA-
7. Ethyl Acetate	141-78-6	400 A, O	24 -4	76	4.1	169	76	2.2	11.0	800 427
8. Ethyl Alcohol (Ethanol)	64-17-5	1000 A, O	54 12	44	1.9	165	74	3.3	19.0	685 363
9. Ethyl Benzene	100-41-4	100 A	59 15	7	0.5	277	136	1.0	6.7	810 432
10. Ethyl-3-ethoxypropionate	763-69-9	50 A, O	136 58	1.11	0.12	320	163	1.05	Unk	-Unk-
11. Glycol Ether EB	111-76-2	25 A, O (skin)	165 74	0.9	0.1	340	171	-NA-	-NA-	-NA-
12. Isobutane	75-28-5	1000 A, 800 N	<-40	>2000	164	11	-12	1.8	8.4	860 460
13. Isobutyl Acetate	110-19-0	150 A, O	69 21	12.5	1.5	233	112	2.4	10.5	790 421
14. Isopropyl Alcohol (Isopropanol)	67-63-0	400 A, O	53 12	31	1.7	180	82	2.0	12.0	750 399
15. Liquid Petroleum Gas	68476-86-8	1000 A, O	<-40	>760	Unknown	-44	-42	2.1	9.5	842 450
16. Methyl Ethyl Ketone	78-93-3	200 A, O	16 -9	85	4.6	174	79	1.8	10.0	759 404
17. Nitrocellulose Resin	9004-70-0	NA	-NA-	NA	NA	-NA-	-NA-	-NA-	-NA-	-NA-
18. Propane	74-98-6	1000 A, O	<-40	>6000	390	-45	-43	2.1	9.5	842 450
19. Talc (Magnesium Silicate)	14807-96-6	2 mg/m ³ Dust	-NA-	NA	NA	-NA-	-NA-	-NA-	-NA-	-NA-
20. Toluene	108-88-3	50 A Skin, 200 O	45 7	38	1.5	230	110	1.2	7.0	896 480
21. VM&P Naphtha	8032-32-4	300 A	45 7	40	2.0	233	112	0.9	7.0	480 249
22. Xylene	1330-20-7	100 A, O	80 27	10	0.8	281	138	1.0	6.4	810 432

*A means ACGIH TLV, N Means NIOSH, O means OSHA PEL. Other abbreviations: CE means Crest Estimate, cu m means cubic meter, Mix. Means Mixture, NA means Not Applicable, NE means Not Established, Skin means skin absorption of vapors and liquid must be considered when protecting against exposure, Unk means Unknown, >means greater than, < means less than.

SECTION IV—PHYSICAL DATA

Pressure of Can Contents: Maximum pressure less than 140

PSI GAUGE at 130°F (54°C). **Evaporation Rate:** See SEC-

TIONS 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.

Appearance and Odor: See SECTION II

SECTION V—FIRE AND EXPLOSION DATA

Flammability Class: Extremely Flammable Aerosol

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, 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:

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 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 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. **DO NOT PUT AEROSOL CONTAINERS IN A HOME TRASH COMPACTOR! DO NOT INCINERATE (OR BURN) AEROSOL CONTAINERS EVEN WHEN EMPTY!** Containers may become pressurized and burst even if they will not spray. Containers must be handled with care due to flammable, pressure producing and toxic residue.

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 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).

KEEP OUT OF THE REACH OF CHILDREN!

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.

HAZARDOUS INGREDIENTS IN AEROSOL ENGINE PAINTS-APPROXIMATE PERCENTAGES BY WEIGHT

Ingredients (Chemicals)	CAS Number	AM1	AM2	AM4	AM11	AM12	AM14	AM16
1. Acetone	67-64-1	20-25	30-40	30-40	15-20	30-40	40-45	15-25
2. Aromatic Hydrocarbon	64742-95-6	1-5	1-5	1-5	-	1-5	-	-
3. n-Butane	106-97-8	-	-	-	5-10	-	-	5-10
4. n-Butyl Acetate	123-86-4	-	-	-	1-5	-	-	5-10
5. n-Butyl Alcohol	71-36-3	-	-	-	-	-	-	1-5
6. Carbon Black	1333-86-4	0.1-1	0.1-0.9	-	-	0.1-0.9	0.1-0.9	-
7. Ethyl Acetate	141-78-6	-	1-4	1-4	1-5	1-4	-	1-5
8. Ethyl Alcohol (Ethanol)	64-17-5	-	5-10	5-10	-	5-10	-	-
9. Ethyl Benzene	100-41-4	-	1-2	1-2	0.14	1-2	1-2	0.10
* 10. Ethyl-3-ethoxy propionate	763-69-9	-	1-10	1-10	-	1-10	-	-
11. Glycol Ether EB	111-76-2	1-5	-	-	1-5	-	-	1-5
12. Isobutane	75-28-5	-	10-15	10-15	-	10-15	-	-
13. Isobutyl Acetate	110-19-0	-	-	-	1-5	-	-	1-5
14. Isopropyl Alcohol (Isopropanol)	67-63-0	-	-	-	1-5	-	-	1-5
15. Liquid Petroleum Gas	68476-86-8	25-30	-	-	-	-	30-35	-
*16. Methyl Ethyl Ketone	78-93-3	-	-	-	20-25	-	-	20-25
17. Nitrocellulose Resin	9004-70-0	-	-	-	1-5	-	-	1-5
18. Propane	74-98-6	-	10-15	10-15	10-15	10-15	-	10-15
19. Talc (Magnesium Silicate)	14807-96-6	-	-	-	-	-	1-5	-
*20. Toluene	108-88-3	15-20	-	-	-	-	5-10	-
21. VM&P Naphtha	8032-32-4	10-15	-	-	-	-	-	-
*22. Xylene	1330-20-7	-	5-10	5-10	-	5-10	1-5	-
Physical Hazard-Fire		80-90	80-90	80-90	80-90	80-90	80-90	80-90
Physical Hazard-Pressure Release		25-30	25-30	25-30	15-25	25-30	30-35	15-25
Health Hazard-Acute		100	100	100	100	100	100	100
Health Hazard-Chronic		80-90	80-90	80-90	80-90	80-90	80-90	80-90
Physical Hazard-Reactivity		-----None of the Engine Paints have this hazard.-----						
Aerosol Level		-----ALL ARE LEVEL 3-----						

Ingredients (Chemicals)	CAS Number	AM1	AM2	AM4	AM11	AM12	AM14	AM16
-------------------------	------------	-----	-----	-----	------	------	------	------

SECTION XIII-VOLATILE ORGANIC COMPOUND (V.O.C.) CONTENT OF AEROSOL ENGINE PAINTS

ACCORDING TO THE UNITED STATES EPA

Stock Numbers	AM1	AM2	AM4	AM11	AM12	AM14	AM16
Percent by Weight	60	60	67	88	65	45	80
Pounds per Gallon	3.64	3.79	4.23	5.30	4.11	2.75	5.42
Grams per Liter	436	454	507	638	492	329	651
Pounds per Can	0.45	0.45	0.50	0.66	0.49	0.34	0.60
MIR	UNK	1.20	UNK	1.50	1.40	UNK	1.90

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: **AM-1, AM-14.**

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

SECTION XV-OZONE DEPLETION IN THE UPPER ATMOSPHERE

No chemicals which destroy ozone in the upper atmosphere are present in the products on this MSDS.

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.