

MATERIAL SAFETY DATA SHEET
INSTABOND INSTANT ADHESIVE ACCELERATOR & REMOVER
 6/29/05

PRODUCTS COVERED: BI-S and BI-D

SECTION I—MANUFACTURER

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SECTION II—PRODUCTS

<u>Stock Number</u>	<u>Product Name on Label</u>	<u>Numbers of Ingredients in Products</u>	<u>HMIS RATING</u>			<u>Appearance; Odor</u>	<u>Solubility % in Water</u>	<u>Volatile Volume%</u>
			<u>H</u>	<u>F</u>	<u>R</u>			
BI-S	Instabond Instant Adhesive Accelerator	1, 2	2	4	0	Amber liquid and strong solvent	<1	100
BI-D	Inst D Solv	3	3*	4	2	Clear, oily liquid; faint fruity odor	10	100

*Chronic health effects may occur from ingredient 3. See SECTION VI.

SECTION III—HAZARDOUS INGREDIENTS

<u>Ingredients</u>	<u>CAS Number</u>	<u>Exposure Limits* in ppm (parts per million)</u>	<u>Flash Point</u>		<u>Vapor Pressure (mm Hg at 20°C)</u>	<u>Evap. Rate (n-Butyl Acetate=1)</u>	<u>Boiling Point</u>		<u>Flammable Limits in %</u>		<u>Autoignition Pt.</u>	
			<u>°F</u>	<u>°C</u>			<u>°F</u>	<u>°C</u>	<u>Lower</u>	<u>Upper</u>	<u>°F</u>	<u>°C</u>
1. Acetone	67-64-1	500 A, 1000 O	-4	-20	185	7.7	132	56	2.6	12.8	869	465
2. N,N-Dimethyl-p-Toluidine	99-97-8	Not Established	208	98	Unknown	0.5**	419	215	Unknown	Unknown	Unknown	Unknown
3. Nitromethane	75-52-5	20 A, 100 O	95	35	28	1.39	212	100	7.3	NE	785	418

*A means ACGIH TLV, O means OSHA PEL. Other abbreviations: >means greater than, < means less than, NA means Not Applicable, NE means Not Established. ** Water = 1. See NOTES in SECTIONS VI & VIII.

<u>Ingredients</u>	<u>LD50 mg / kg</u>	<u>Animal</u>	<u>Route</u>	<u>LC50 ppm / 8 Hours</u>	<u>LC50 mg / m³ / 8 Hours</u>	<u>Animal</u>
1. Acetone	5800	Rat	Oral	NA	50100	NA
2. N,N-Dimethyl-p-Toluidine	550	Rat	Oral	Not Determined	NA	NA
3. Nitromethane	940	Rat	Oral	Not Determined	NA	NA
	950	Mouse	Oral	Not Determined	NA	NA

SECTION IV—PHYSICAL DATA

Evaporation Rate: See SECTIONS II, III. **Vapor Density:** Heavier than air. **Solubility in Water (Wt%):** See SECTION III.

Volatile Volume %: See SECTION II. **Approximate Boiling Point:** See SECTIONS II, III. **Product Density (water=1)—BI-S:**

Less than 1. **BI-D:** Greater than 1.

Appearance and Odor: See SECTION II

SECTION V—FIRE AND EXPLOSION DATA

Flammability Class: BI-S: Extremely Flammable Liquid, **BI-D:** Flammable Liquid

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

Approximate Flammable Limits: See SECTIONS II, III.

Autoignition Temperature: See SECTIONS III.

Extinguishing Media: For large fires, use water spray, fog, or alcohol-resistant foam. Water may be ineffective.

DO NOT use dry chemical extinguishers to control fires involving Nitromethane.

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, Ingestion.

SIGNS AND SYMPTOMS OF EXPOSURE:

INHALATION:

Acute Exposure: Vapors at concentrations above the TLV can irritate the respiratory tract (nose, throat, and 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. **NOTE:** Overexposure to 3. **Nitromethane** may cause Methemoglobinemia, which is characterized by dizziness, drowsiness, headache, breath shortness, cyanosis with bluish skin, rapid heart rate and chocolate-brown colored blood.

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. Exposure may cause irritation characterized by redness, dryness, and inflammation.

Chronic Exposure: Exposure to small amounts of solvent over long periods 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: 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. **NOTE:** See note in SECTION VI, **INHALATION, Acute Exposure** above.

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.

CARCINOGENICITY: BI-S and its ingredients not listed by NTP, IARC or OSHA. **Nitromethane (BI-D): ACGIH:** A3—Animal Carcinogen—clear evidence of carcinogenic activity for female rats and male and female mice. **IARC:** Group 2B carcinogen **OSHA:** Possible Select carcinogen **NOTE:** Risk to health depends on level and duration of exposure. Use BI-D outdoors, if possible. If you must use indoors, open all windows and doors or use other means to assure fresh air movement during use. If properly used, a respirator may offer additional protection. Get professional advice for respirator use. A dust mask does not provide protection against vapors! Clean up rags

and other waste immediately and allow vapors to evaporate outdoors. **DO NOT USE IN BASEMENT OR OTHER UNVENTILATED AREA!**

SECTION VII-EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: Flush with clean, lukewarm water (low pressure) for at least 15 minutes while lifting eyelids. Do NOT allow victim to rub or keep eyes closed. Refer person to physician for immediate attention.

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

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

INGESTION: DO NOT INDUCE VOMITING! If victim is conscious and alert, give 2-4 cupfuls of milk or water. Consult physician, hospital emergency room or poison control center immediately. Have list of ingredients available.

NOTES TO PHYSICIAN:

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

Skin: Treat as any contact dermatitis.

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

Ingestion: Treat as for solvent ingestion. Inducing vomiting is contraindicated because of the possibility of chemical pneumonia caused by aspiration of solvent. **Methemoglobinemia caused by Inhalation or Ingestion of BI-D. Antidote:** Methylene blue. Administer oxygen alone or with Methylene blue depending on the concentration in the blood.

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 ingredients below their respective TLV's is not possible, an OSHA/MSHA approved Respirator must be used. 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!

KEEP OUT OF THE REACH OF CHILDREN

SECTION XII-ENVIRONMENTAL PROTECTION AGENCY (EPA) REGULATORY INFORMATION

The adjacent 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.

HAZARDOUS INGREDIENTS IN PRODUCTS- APPROXIMATE PERCENTAGES BY WEIGHT

Ingredients	CAS Number	BIS	BID
1. Acetone	67-64-1	95-98	-
2. N,N-Dimethyl-p-Toluidine	99-97-8	2-5	-
3. Nitromethane	75-52-5	-	100
Physical Hazard-Fire		95-98	100
Physical Hazard-Pressure Release		-	-
Health Hazard-Acute		100	100
Health Hazard-Chronic		-	100
Physical Hazard-Reactivity		-	100

SECTION XV-OZONE DEPLETION IN THE UPPER ATMOSPHERE

No ozone depleting chemicals are present in these products.

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.

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

NITROMETHANE (BI-D) DANGERS: May explosively decompose on shock, friction, or concussion. May explode on heating. The substance decomposes on burning producing nitrogen oxides. Reacts with alkalis, reacts violently with strong oxidants and strong reducing agents causing fire and explosion hazard. Forms shock sensitive mixture with amines.

STABILITY: Stable under normal room conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY (Materials to Avoid)-BI-S: Strong oxidizers, Cyanoacrylates. **BID:** Acetone, alkalis, amines, strong oxidizers and strong reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: By high heat and fire: carbon dioxide, carbon monoxide, hydrocarbon vapors, nitrogen oxides, 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 is the preferred method. Containers must be handled with care due to flammable, toxic and pressure producing residue.

RCRA STATUS: Since these products contain ignitable and toxic chemicals (BI-D reactive, also), 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 (29CFR 1910.1200).

SECTION XIII-VOLATILE ORGANIC COMPOUND

(V.O.C.) CONTENT ACCORDING TO THE FEDERAL EPA

Stock Numbers	BIS	BID
Percent by Weight	2.5	100
Pounds per Gallon	0.17	9.4
Grams per Liter	20	934
Pounds per Bottle	0.003	0.147

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 for **Nitromethane containing product (BI-D):**

WARNING: This product contains a chemical known to the State of California to cause cancer.