

**MATERIAL SAFETY DATA SHEET
BULK CLEANERS-SOLVENT BASED**

6/20/05

PRODUCTS COVERED: BN-CQ, BP-C, BS-A, BS-H, BS-X, ZBP-X (On Label, BP-X in catalog)

SECTION I-MANUFACTURER

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SECTION II-PRODUCTS

Stock Number	Product Name on Label	Numbers of Ingredients in Products	HMIS RATING			Appearance and Odor	Solubility % in Water	Volatile Volume %
			H	F	R			
BN-CQ	Non-Chlorinated Brake Cleaner-Quick Drying	4, 6	3	3	0	Clear liq., mild solvent	<1	100
BP-C	PrimaClean	6	3	3	0	Clear liq., alcohol odor	100	100
BS-A	Acry-Solv Solvent Cleaner	2,8,9	2	3	0	Clear liquid, mild solvent	<1	100
BS-H	Hi-Solv Super Strength Solvent Cleaner	2,6,8,9	3	3	0	Clear liq., mild solvent	10 to 12	100
BS-X	Super-Solv Extra Strength Solvent Cleaner	2,6,8,9	3	3	0	Clear liq., alcohol odor	19 to 21	100
ZBP-X	Prep-Flex	1,3,5,7	3	3	0	Clear liq., strong solvent	<1	100

SECTION III-HAZARDOUS INGREDIENTS

Ingredients	CAS Number	Exposure Limits* in ppm (parts per million)	Flash Point		Vapor Pressure (mm Hg at 20 C)	Evap. Rate (n-Butyl Acetate=1)	Boiling Point		Flammable Limits in %		Autoignition Pt.	
			F	C			F	C	Lower	Upper	F	C
1. Ethylene Glycol Monobutyl Ether	111-76-2	25 A, O (skin)	165	74	0.9	0.1	340	171	-NA-	-NA-	-	-
2. Ethyl Benzene	100-41-4	100 A	59	15	7	0.5	277	136	1.0	6.7	810	432
3. Ethylene Glycol Monopropyl Ether	2807-30-9	Not Established	120	49	1.0	0.2	301	149	Unknown	Unknown	Unknown	Unknown
4. Hexsol (Light Petroleum Distillate)	64741-84-0	50 A, 500 O	-6	-21	106	8.8	148	64	1.0	7.0	433	223
5. Isobutanol	78-83-1	50 A, 100 O	85	29	8.8	0.6	227	108	1.7	11.0	800	427
6. Isopropyl Alcohol	67-63-0	400 A, O	53	12	31	1.7	180	82	2.0	12.0	750	399
7. Toluene	108-88-3	50 A Skin, 200 O	45	7	38	1.5	230	110	1.2	7.0	896	480
8. VM&P Naphtha	8032-32-4	300 A	40	4	45	2.0	235	113	0.9	7.0	480	249
9. Xylene (Mixed Isomers)	1330-20-7	100 A, O	80	27	10	0.8	281	138	1.0	6.4	810	432

*A means ACGIH TLV, O means OSHA PEL. Other abbreviations: > means greater than, < means less than, NA means Not Applicable.

**See NOTE in SECTION VI.

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): All less than.

Appearance and Odor: See SECTION II

SECTION V-FIRE AND EXPLOSION DATA

Flammability Class: Extremely Flammable: BN-CQ

Flammable: BP-C, BS-A, BS-H, BS-X, ZBP-X.

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: Prolonged and/or repeated overexposure to 4. Hexsol (containing n-Hexane) may cause Peripheral Neuropathy (damage to nerve tissue of the arms or legs) resulting in muscular weakness and loss of sensation in some or all of the following: fingers, hands, arms, toes, feet or legs.

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 cleaners 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 cleaners over long periods of time may cause some or all of the symptoms as in acute exposure to cleaners.

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: 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.

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. Wash affected areas thoroughly with 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 Respirator or TC19C Air Supplied 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!**

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 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—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 products covered by this MSDS.

HAZARDOUS INGREDIENTS IN BULK CLEANERS-SOLVENT BASED APPROXIMATE PERCENTAGES BY WEIGHT

Ingredients (Chemicals)	CAS Number	BN-CQ	BPC	BSA	BSH	BSX	ZBPX
1. Ethylene Glycol Monobutyl Ether	111-76-2	—	—	—	—	—	>1
*2. Ethyl Benzene	100-41-4	—	—	06	05	04	—
3. Ethylene Glycol Monopropyl Ether	2807-30-9	—	—	—	—	—	>1
4. Hexsolv	64741-84-0	82	—	—	—	—	—
5. Isobutanol	78-83-1	—	—	—	—	—	>1
6. Isopropyl Alcohol	67-63-0	18	100	—	11	20	—
*7. Toluene	108-88-3	—	—	—	—	—	>1
8. VM&P Naphtha	8032-32-4	—	—	67	61	56	—
*9. Xylene (Mixed Isomers)	1330-20-7	—	—	27	23	20	—
Physical Hazard-Fire		100	100	100	100	100	100
Physical Hazard-Pressure Release		N O T A H A Z A R D					
Health Hazard-Acute		A L L A R E 1 0 0 %					
Health Hazard-Chronic		A L L A R E 1 0 0 %					
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

	BN-CQ	BP-C	BS-A	BS-H	BS-X	ZBP-X
Percent by Weight	100	100	100	100	100	100
Pounds per Gallon	5.8	6.6	6.5	6.5	6.5	7.2
Grams per Liter	695	791	779	779	779	863

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 warning applies for the Toluene containing products: BSA, BSH, BSX, and ZBPX

WARNING: These products contain a chemical known to the state of California to cause birth defects and other reproductive harm. **NOTE:** BSA, BSH and BSX contain only trace amounts of Toluene (less than 1%) but it is enough to require the warning.

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.