

MATERIAL SAFETY DATA SHEET

BL 2161

SECTION 1: PRODUCT INFORMATION

PRODUCT NAME: BL 2161	PRODUCT USE: Dispersant
MANUFACTURER/SUPPLIER: Buckman Laboratories of Canada, Ltd. 351 Joseph Carrier Vaudreuil-Dorion, Quebec J7V 5V5	EMERGENCY TELEPHONE NUMBER: (450) 424 - 4404

SECTION 2: PREPARATION INFORMATION

MSDS PREPARED BY: Buckman Laboratories of Canada, Ltd.	DATE PREPARED: April 8, 2002 (M/D/Y)
TELEPHONE: (450) 424-4404	SUPERSEDES: Feb 19, 2001

SECTION 3: HAZARDOUS INGREDIENTS

INGREDIENT	CHEMICAL NAME	CAS REGISTRY #	% BY WT.
1	Solvent naphtha (petroleum), heavy aromatic	64742-94-5	30.0 - 60.0
2	Naphthalene	91-20-3	3.0 - 7.0
3	1,2,4-Trimethylbenzene	95-63-6	0.5 - 1.5

INGREDIENT	ACUTE ORAL LD50 (mg/kg)	ACUTE DERMAL LD50 (mg/kg)	ACUTE INHALATION LC50 (ppm)	TLV
1	Not available	Not available	Not available	100 ppm
2	533 (male mouse)	Not available	Not available	10 ppm
3	5000 (rat)	Not available	18 g/m3 (rat)	25 ppm

The balance of the components are not hazardous according to WHMIS classifications and are not listed on the Ingredient Disclosure List.

SECTION 4: PHYSICAL DATA

APPEARANCE: Clear, golden	PHYSICAL STATE: Liquid	ODOUR: Petroleum type	ODOUR THRESHOLD: Not tested
DENSITY (g/ml @ 25°C): 0.90	EVAPORATION RATE: Not tested	VAPOUR DENSITY: Not tested	VAPOUR PRESSURE: Not tested
pH (neat): Not applicable	pH (100 ppm in water) 6 - 7	BOILING POINT: Not tested	FREEZING / MELTING POINT: Not tested

OIL/WATER PARTITION COEFFICIENT: Not tested	SOLUBILITY: Disperses in water
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SECTION 5: FIRE AND EXPLOSION HAZARDS

FLASH POINT & METHOD: 58°C (TCC)	AUTO-IGNITION TEMPERATURE: Not determined
UPPER FLAMMABLE LIMIT (% vol. in air): Not determined	LOWER FLAMMABLE LIMIT (% vol. in air): Not determined
FLAMMABILITY CONDITIONS: Liquid can burn upon heating to temperatures at or above the flash point.	HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, oxides of nitrogen.
EXTINGUISHING MEDIA: Use water spray to cool fire exposed surfaces and to protect personnel. Water fog, carbon dioxide, foam or dry chemical may be used to extinguish fire.	SPECIAL FIRE FIGHTING PROCEDURES: Wear NIOSH approved self-contained breathing apparatus (such as "Scott Air-Pak"), and full protective gear. Isolate "fuel" supply from fire.
EXPLOSION (Sensitivity to Mechanical Impact): Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Avoid pressurizing, cutting, welding, brazing, soldering, drilling, or grinding the container.	EXPLOSION (Sensitivity to Static Discharge): Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Avoid exposing such containers to heat, flame, sparks, static electricity or other sources of ignition.

SECTION 6: REACTIVITY

CHEMICAL STABILITY: Stable under normal conditions of use and storage.	CONDITIONS OF UNSTABILITY: Not determined.
INCOMPATIBILITY WITH OTHER SUBSTANCES: Strong acids, strong bases, strong oxidizers, and reducing agents.	HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, oxides of nitrogen

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SECTION 7: TOXICOLOGICAL DATA

PRIMARY ROUTES OF EXPOSURE:

Eyes:	Yes	Skin:	Yes	Inhalation	Yes	Ingestion:	No Data
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EFFECTS FROM ACUTE EXPOSURE:

Eye exposure:	Irritant. Effects may vary depending on the length of exposure, solution concentration, and first aid measures.
Skin exposure:	Irritant. Effects may vary depending on the length of exposure, solution concentration, and first aid measures.
Inhalation:	May cause irritation of mucous membranes and lungs. Exposed individuals should be monitored for respiratory distress, bronchitis or pneumonia.
Ingestion:	Ingestion is not expected to be a primary route of exposure. No data is available on human exposure.

EFFECTS FROM CHRONIC EXPOSURE:

Prolonged exposure to oil component can cause central nervous system depression - headache, dizziness, and possible loss of consciousness.

ACUTE EFFECTS (Exposure Limits):

Acute Oral LD50:	Not expected to be toxic, based on the components.
Acute Dermal LD50:	Not expected to be toxic, based on the components.
Acute Inhalation LC50:	No data available.

IRRITANT EFFECTS:	Eye and skin irritating.
SENSITIZATION EFFECTS:	Not tested but none expected.
CARCINOGENIC POTENTIAL:	Not listed in any of OSHA Standards Section 1910.1200 sources as carcinogenic.
REPRODUCTIVE TOXICITY:	None known.
TERATOGENICITY:	None known.
MUTAGENICITY:	None known.
SYNERGISTIC EFFECTS:	None known.

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SECTION 8: PREVENTION MEASURES

PERSONAL PROTECTION EQUIPMENT:
Hands: Chemical resistant gloves required, chemically impermeable rubber gloves recommended.
Eyes: Safety glasses required, safety goggles recommended.
Respiratory: If misting can occur, a NIOSH approved respirator is recommended. COMMENTS: Due to the oil-based components of this mixture, if misting may occur, exposures are recommended to be controlled at 5 mg/m ³ or lower.
Body Protective Clothing: Safety protective clothing such as work coveralls or long sleeve shirt and trousers is required.
Footwear: Steel-toed chemical resistant boots recommended.
Other: An emergency shower complete with eye-wash fountain is strongly recommended.
ENGINEERING CONTROLS: General mechanical ventilation system is adequate. However, local exhaust system is preferred to maintain airborne concentrations below the recommended occupational exposure limits, whenever misting conditions are present or the material is used in a confined space.
LEAK AND SPILL PROCEDURES: Before responding to a spill or leak of this product, review each section of this MSDS. Follow the recommendations given in the "Handling Procedures and Equipment" section. Check the "Fire and Explosion Hazards" section to determine if the use of non-sparking tools is merited. Insure that spilled or leaked product does not come into contact with materials listed as incompatible. If irritating fumes are present, consider evacuation of affected areas. Initially minimize area affected by the spill or leak. Block any potential routes to water systems. Place in a properly labeled container for later disposal. Larger spills may require a vacuum.
WASTE DISPOSAL METHODS: Disposal shall be in accordance with all applicable federal, provincial and municipal waste regulations.
HANDLING PROCEDURES AND EQUIPMENT: Do not handle unless the safety precautions have been read and understood. Avoid skin and eye contact. Avoid inhalation of dust or vapours. Do not puncture, drag or slide containers. Do not smoke in any chemical handling or storage area. Wash hands before eating.
STORAGE REQUIREMENTS: Store in a dry well-ventilated location. Protect from freezing. Keep containers tightly closed. Store away from incompatible materials and ignition sources.
SPECIAL SHIPPING INFORMATION: Refer to Section 10 : T.D.G. Classification

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SECTION 9: FIRST AID MEASURES

EYE EXPOSURE:

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 15 - 20 minutes or until the chemical is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into unaffected eye or onto the face. If irritation persists, repeat flushing. Obtain medical attention immediately.

SKIN EXPOSURE:

As quickly as possible, flush with lukewarm, gently flowing water for at least 15 minutes or until the chemical is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). If irritation persists, repeat flushing. Obtain medical advice immediately. Completely decontaminate clothing, shoes and leather goods before reuse or discard.

INHALATION:

Use proper respiratory protection to immediately move exposed individual to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. If breathing is stopped, trained personnel should begin artificial respiration (AR) or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Avoid mouth to mouth contact by using mouth guards or shields. Immediately transport victim to an emergency care facility.

INGESTION:

NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 240 to 300 ml (8 to 10 oz.) of water to dilute material in stomach. If vomiting occurs naturally, rinse mouth and repeat administration of water. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. Obtain medical attention immediately.

SECTION 10: REGULATORY CLASSIFICATIONS

TDG CLASSIFICATION:

FLAMMABLE LIQUIDS, N.O.S. [Naphthalene], [Solvent naphta (petroleum) heavy aromatic], [1, 2, 4-Trimethylbenzene]
Class 3 - UN 1993 - PG III

Pest Control Products Act: REGISTRATION NUMBER: Not applicable. This product is not a registered pesticide.

U.S. FDA REGULATIONS: FDA (21 CFR) Section(s):

176.210

WHMIS CLASSIFICATION:

Class B; Division 3 (combustible). Class D; Division 2B (eye and skin irritant).

DOMESTIC SUBSTANCES LIST (DSL):

All Components are listed on the DSL.

HAZARD RATING:

RATING	HEALTH	FLAMMABILITY	REACTIVITY
HMIS	1	2	1
NFPA	1	2	1

While the information and recommendations set forth are believed to be accurate as of the date of the Material Safety Data Sheet, Buckman Laboratories of Canada, Ltd. makes no warranty with respect thereto and disclaims all liability from reliance thereon. Buckman Laboratories of Canada, Ltd. urges each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. To promote the safe use and handling of this product, each customer or recipient should distribute this MSDS to the product users.

This MSDS expires April 8, 2005

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Prepared by: Buckman Laboratories of Canada, Ltd.