

Material Safety Data Sheet



BLAST

Section 1. Chemical product and company identification

Trade name : BLAST
Product use : Floor Stripper
Supplier : Ecolab, Professional Products Division
370 Wabasha Street N
St. Paul MN 55102
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326
Code : 903621
Date of issue : 09-January-2006

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Composition, information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
2-butoxyethanol	111-76-2	15 - 40
2-aminoethanol	141-43-5	7 - 13
sodium hydroxide	1310-73-2	3 - 7
xylenesulfonic acid, sodium salt	1300-72-7	3 - 7
alcohols, c12-16, ethoxylated	68551-12-2	0.5 - 1.5

Section 3. Hazards identification

Physical state : Liquid. (Liquid.)
Emergency overview : DANGER!
CAUSES EYE AND SKIN BURNS.
CAUSES SEVERE RESPIRATORY TRACT IRRITATION.
COMBUSTIBLE LIQUID AND VAPOUR.
VAPOUR MAY CAUSE FIRE.
HARMFUL IF SWALLOWED.
Do not ingest. Do not get in eyes or on skin or clothing. Avoid breathing vapour or mist. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Routes of entry : Skin contact, Eye contact, Inhalation, Ingestion
Potential acute health effects
Eyes : Corrosive to eyes.
Skin : Corrosive to the skin.
Inhalation : Severely irritating to the respiratory system.
Ingestion : Harmful if swallowed. Causes burns to mouth, throat and stomach.

See toxicological information (section 11)

Section 4. First-aid measures

Eye contact : In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin Contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion : Rinse mouth; then drink one or two large glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire-fighting measures

Auto-ignition temperature	: Not available.
Flash point	: 82.2222 °C (Closed cup)
Flammable limits	
Upper:	Not available.
Lower:	Not available.
Products of combustion	: Not available.
Fire-fighting media and instructions	: In case of fire, use water spray (fog), foam, dry chemical or CO ₂ . Dyke area of fire to prevent runoff. Combustible liquid and vapour. May burn, but does not ignite readily. Under high temperatures or under moderate heating might release vapor in sufficient quantities to produce hazardous atmospheres with air.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Risk of explosion of the product in the presence of mechanical impact: Not available.	
Risk of explosion of the product in the presence of static discharge: Not available.	

Section 6. Accidental release measures

Personal Precautions	: Ventilate area of leak or spill. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8). Stop leak if without risk. Prevent entry into sewers, water courses, basements or confined areas.
Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Methods for cleaning up	: If emergency personnel are unavailable, contain spilt material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilt material in an appropriate container for disposal.

Section 7. Handling and storage

Handling	: Do not ingest. Do not get in eyes, on skin or on clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapour or mist. Keep away from heat, sparks and flame. To avoid fire, eliminate ignition sources. Wash thoroughly after handling.
Storage	: Keep out of the reach of children. Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Store between 0 and 40°C

Section 8. Exposure controls, personal protection

Engineering controls	: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. Provide eyewash and safety shower in area if contact or splash hazard exists.
Personal protection	
Eyes	: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.
Hands	: Use chemical-resistant, impervious gloves.
Skin	: Use synthetic apron, other protective equipment as necessary to prevent skin contact.
Respiratory	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Name	Exposure limits

2-butoxyethanol	ACGIH TLV (United States, 1/2004). TWA: 20 ppm 8 hour(s). Form: All forms
2-aminoethanol	ACGIH TLV (United States, 1/2004). STEL: 15 mg/m ³ 15 minute/minutes. Form: All forms STEL: 6 ppm 15 minute/minutes. Form: All forms TWA: 7.5 mg/m ³ 8 hour(s). Form: All forms TWA: 3 ppm 8 hour(s). Form: All forms
sodium hydroxide	ACGIH TLV (United States, 1/2004). CEIL: 2 mg/m ³

Section 9. Physical and chemical properties

Physical state	: Liquid. (Liquid.)
Colour	: Clear.
Odour	: Aromatic.
pH	: 13.25 (100%)
Boiling/condensation point	: >100 °C
Melting/freezing point	: Not available.
Specific gravity	: 1.05 (Water = 1)
Vapour pressure	: Not applicable.
Vapour density	: Not available.
Odour threshold	: Not available.
Evaporation rate	: Not available.
LogK _{ow}	: Not available.
Solubility	: Easily soluble in cold water, hot water.

Section 10. Stability and reactivity

Stability	: The product is stable.
Conditions of instability	: Not available.
Reactivity	: Reactive with metals, acids.
Incompatibility with various substances	: Not available.
Hazardous Decomposition Products	: Not available.

Section 11. Toxicological information

Potential acute health effects

Eyes	: Corrosive to eyes.
Skin	: Corrosive to the skin.
Inhalation	: Severely irritating to the respiratory system.
Ingestion	: Harmful if swallowed. Causes burns to mouth, throat and stomach.
Irritancy of Product	: Hazardous by WHMIS criteria.

Potential chronic health effects

Carcinogenic effects	: No known significant effects or critical hazards.
Mutagenic effects	: No known significant effects or critical hazards.
Teratogenic effects	: No known significant effects or critical hazards.
Reproductive effects	: No known significant effects or critical hazards.
Sensitization to Product	: No known significant effects or critical hazards.
Synergistic products (toxicologically)	: Not available.

Toxicity data

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
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2-butoxyethanol	LD50	470 mg/kg	Oral	Rat
	LD50	300 mg/kg	Oral	Rabbit
	LD50	1200 mg/kg	Oral	Guinea pig
	LD50	220 mg/kg	Dermal	Rabbit
2-aminoethanol	LD50	1720 mg/kg	Oral	Rat
	LD50	620 mg/kg	Oral	Guinea pig
	LD50	700 mg/kg	Oral	Mouse
	LDLo	1400 mg/kg	Oral	Mammal
sodium hydroxide	LDLo	500 mg/kg	Oral	Rabbit

Target organs : Contains material which causes damage to the following organs: blood, kidneys, lungs, liver, lymphatic system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Section 12. Ecological information

Ecotoxicity data

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
2-butoxyethanol	Lepomis macrochirus (LC50)	96 hour(s)	1490 mg/l
2-aminoethanol	Oncorhynchus mykiss (LC50)	96 hour(s)	150 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	>200 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	300 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	>300 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	329.16 mg/l
	Pimephales promelas (LC50)	96 hour(s)	2070 mg/l

Products of degradation : These products are carbon oxides (CO, CO₂) and water, nitrogen oxides (NO, NO₂ etc.), sulphur oxides (SO₂, SO₃, etc.). Some metallic oxides.

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Consult your local or regional authorities.

Section 14. Transport information

<u>Regulatory information</u>	<u>UN number</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>Packing group</u>	<u>Additional information</u>
TDG Classification	UN1719	CAUSTIC ALKALI LIQUID, N.O.S. (Sodiumhydroxide, Monoethanolamine)	8	II	<u>Passenger Carrying Road or Rail Index</u> 1 <u>Special provisions</u> 16

APPLIES ONLY DURING ROAD TRANSPORT

Any variation of the shipping description based on the packaging is not addressed.

Section 15. Regulatory information

WHMIS : Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-2B: Material causing other toxic effects (Toxic).
Class E: Corrosive material.

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

Section 16. Other information

Date of issue : 09-January-2006.
Responsible name : Regulatory Affairs
Date of previous issue : 30-August-2005.

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.