Material Safety Data Sheet

LIQUID EXEC 120 BRITENESS BOOSTER

Section 1. Chemical product and company identification

Trade name : LIQUID EXEC 120 BRITENESS BOOSTER
Product use : Laundry product
Supplier : Textile Care - Division of Ecolab Co.
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326
Code : 912360-06
Date of issue **09-April-2008**

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

Name	CAS number	% by weight
sodium hydroxide	1310-73-2	15 - 40
triethanolamine	102-71-6	1 - 5
acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	1 - 5

Section 3. Hazards identification

Physical state : Liquid. [Liquid.]
Emergency overview : DANGER !

CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY BE HARMFUL IF SWALLOWED.

Do not ingest. Do not get in eyes, on skin or on clothing. Do not breathe vapour or spray. Use only with adequate ventilation. Keep container closed. 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. May cause sensitisation by skin contact.
Inhalation : Corrosive to the respiratory system.
Ingestion : Causes burns to mouth, throat and stomach. May be harmful if swallowed.

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. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation : If inhaled, remove to fresh air. If exposed person is not breathing, give artificial respiration or oxygen applied by trained personnel. Get medical attention immediately.

Ingestion : If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. 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 : > 100°C
Product does not support combustion.

Flammable limits : Not available.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon oxides
nitrogen oxides
metal oxide/oxides

Fire-fighting media and instructions : Use an extinguishing agent suitable for the surrounding fire.
Dyke area of fire to prevent runoff.

In a fire or if heated, a pressure increase will occur and the container may burst.

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 : Immediately contact emergency personnel. Stop leak if without risk. Use suitable protective equipment. Keep unnecessary personnel away. Do not touch or walk through spilt material.

Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dyke spilt material or otherwise contain it 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. Do not breathe vapour or spray. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Storage : Keep out of reach of children. Keep container in a cool, well-ventilated area. Keep container tightly closed.
Do not store above the following temperature: 50°C

Section 8. Exposure controls, personal protection

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

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 : Wear appropriate respirator when ventilation is inadequate and occupational exposure limits are exceeded.

Name	Exposure limits

sodium hydroxide	**CA Alberta Provincial (Canada, 10/2006).** 15 min OEL: 2 mg/m³ 15 minute(s). **CA British Columbia Provincial (Canada, 7/2007).** STEL: 2 mg/m³ 15 minute(s). **CA Ontario Provincial (Canada, 3/2007).** CEV: 2 mg/m³ **CA Quebec Provincial (Canada, 12/2006).** STEV: 2 mg/m³ 15 minute(s). **ACGIH TLV (United States, 1/2007).** C: 2 mg/m³
triethanolamine	**CA Alberta Provincial (Canada, 10/2006).** 8 hrs OEL: 5 mg/m³ 8 hour(s). **CA British Columbia Provincial (Canada, 7/2007).** TWA: 5 mg/m³ 8 hour(s). **CA Ontario Provincial (Canada, 3/2007).** TWAEV: 3.1 mg/m³ 8 hour(s). TWAEV: 0.5 ppm 8 hour(s). **CA Quebec Provincial (Canada, 12/2006). Skin sensitiser** TWAEV: 5 mg/m³ 8 hour(s). **ACGIH TLV (United States, 1/2007).** TWA: 5 mg/m³ 8 hour(s).

Section 9. Physical and chemical properties

Physical state	:	Liquid. [Liquid.]
Colour	:	Colourless.
Odour	:	Ammoniacal.
pH	:	12.5 Conc. (% w/w): 100%]
Boiling/condensation point	:	>100°C (>212°F)
Melting/freezing point	:	Not available.
Specific gravity	:	1.35
Vapour pressure	:	Not available.
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. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions of instability	:	Not available.
Reactivity	:	Highly reactive with acids. Reactive with metals.
Hazardous Decomposition Products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Potential acute health effects

Eyes	:	Corrosive to eyes.
Skin	:	Corrosive to the skin. May cause sensitisation by skin contact.
Inhalation	:	Corrosive to the respiratory system.
Ingestion	:	Causes burns to mouth, throat and stomach. May be harmful if swallowed.

Potential chronic health effects

Carcinogenic effects : No known significant effects or critical hazards.

Ingredient name	ACGIH	IARC	NTP	OSHA

Not applicable.

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 : May cause sensitisation by skin contact.
Synergistic products (toxicologically) : Not available.

Toxicity data

Ingredient name	Test	Route	Result	Species
sodium hydroxide	LD50	Dermal	>2000 mg/kg	Rabbit
	LD50	Dermal	1350 mg/kg	Rabbit
	LD50	Oral	500 mg/kg	Rabbit
	LD50	Oral	300 to 500 mg/kg	Rat
	LDLo	Oral	500 mg/kg	Rabbit
triethanolamine	LD50	Dermal	>20 mL/kg	Rabbit
	LD50	Dermal	>16 mL/kg	Rat
	LD50	Oral	2200 mg/kg	Rabbit
	LD50	Oral	2200 mg/kg	Guinea pig
	LD50	Oral	5846 mg/kg	Mouse
acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	LD50	Oral	10 g/kg	Rat
	LD50	Oral	7 g/kg	Rabbit

Target organs : Contains material which may cause damage to the following organs: lungs, upper respiratory tract.

Section 12. Ecological information

Ecotoxicity

Ingredient name	Species	Period	Result
sodium hydroxide	Daphnia	48 hours	Acute EC50 156 mg/L
	Daphnia	48 hours	Acute EC50 45.4 mg/L
	Daphnia	48 hours	Acute EC50 40 mg/L
	Fish	96 hours	Acute LC50 189 mg/L
	Fish	96 hours	Acute LC50 72 mg/L
triethanolamine	Algae	48 hours	Acute EC50 750 mg/L
	Algae	48 hours	Acute EC50 470 mg/L
	Fish	96 hours	Acute LC50 11800 mg/L
acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	Fish	96 hours	Acute LC50 3092000 to 3540000 ug/L Fresh water
	Fish	96 hours	Acute LC50 2070000 to 2180000 ug/L Fresh water
	Fish	96 hours	Acute LC50 1030000 to 1080000 ug/L Fresh water
	Fish	96 hours	Acute LC50 486000 to 500000 ug/L Fresh water

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

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional information
TDG Classification	UN1824	SODIUM HYDROXIDE SOLUTION	8	II	**Passenger Carrying Road or Rail Index** 1

APPLIES ONLY DURING ROAD TRANSPORT

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

Section 15. Regulatory information

WHMIS : 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-April-2008.**

Responsible name : **Regulatory Affairs**
1-800-352-5326

Date of previous issue : **20-April-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.