

SUPPLIER MATERIAL SAFETY DATA SHEET (MSDS)

N/D=Not Determined
N/A=Not Applicable

Product: CRYSTAL BUFF

Manufacturer: ESTEAM

Flammability: 0

Chem. Name: N/A

Trade Name: Crystal Buff

Reactivity: 0

Chem. Family: Mixture

Use: Carpet bonnet cleaning solution

Health: 2

Protection:

NFPA LEAST=0, SLIGHT=1, MODERATE=2, HIGH=3, EXTREME=4

HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	CAS #	% WT
N-Alkyl Dimethyl Benzylammonium Chloride	68424-85-3	2
D-Limonene	5989-27-5	1-5
2-Butoxyethanol	111-76-2	1-5

CAS #

% WT

HAZARD DATA

LD50 404 mg/kg (oral-rat)
LD50 4400 mg/kg (oral-rat)
LD50 1746 mg/kg (oral-rat)

EXPOSURE LIMITS (TLV)

N/A
N/A
25 ppm TWA

PHYSICAL DATA

Physical State: Liquid

Boiling Point (C): 214

Solubility in Water: Complete

Evaporation Rate: 1

Freeze/Thaw Stable: Yes

Percent Volatile (vol): 70+

Odor/ Appearance: Pale yellow, faint odor

Freezing Point (C): N/D

Ph (undiluted): 7.6

Specific Gravity: Approx 1

Vapor Pressure: As water

FIRE & EXPLOSION HAZARD

Flammability: N

Means of Extinction: N/A

Special Procedures: SCBA & protective gear. Cool containers

Explosion Sensitivity to Impact: N/A

Chemical Sensitivity to Static Discharge: N/A

Flashpoint (C) & Method: N/A

Conditions: None

Hazardous Combustion Products: None

Upper Explosion Limit (% by vol): N/A

Lower Explosion Limit (% by vol): N/A

Auto-ignition: N/A

Rate of Burning: N/A

Explosive Power: N/A

TDG/WHMIS: Non hazardous / D2B

REACTIVITY DATA

Chemical Stability: Stable

Hazardous Decomposition Product: Ammonia, CO, CO₂, HCl, NO_x

Incompatible Substances: Excessive heat, oxidizing and reducing agents

TOXICOLOGICAL PROPERTIES

Route of Entry - Skin Contact:	N
Route of Entry - Skin Absorption:	N
Route of Entry - Eye Contact:	Y
Route of Entry - Inhalation:	Y
Route of Entry - Ingestion:	Y

Reproductive Effects Y/N:	N
Carcinogenicity Y/N:	N
Mutagenicity Y/N:	N
Teratogenicity Y/N:	N
TLV:	N/D

Effects of Overexposure:

Acute Effects:

May cause irritation to mucous membranes if inhaled. Causes burning pain in mouth, throat and abdomen if swallowed. May also cause swelling of the larynx along with skeletal muscle paralysis affecting breathing, circulatory shock and/or convulsions. May cause eye irritation and/or damage on contact. May irritate skin.

Chronic Effects:

None known.

PREVENTATIVE MEASURES

Gloves: Neoprene or Rubber
Eyes: Chemical goggles

Footwear: N/A
Respirator: NIOSH mist filter

Clothing: N/A
Other: As required to prevent contact

Recommended Engineered Controls:
Use with good general ventilation.

Leak & Spill Procedures:
Flush to a sanitary drain.

Waste Disposal Methods:
According to federal, provincial and municipal regulations.

Special Handling Procedures:
Avoid contact with eyes and skin. Store in a cool, dry place away from children.

FIRST AID MEASURES

Inhalation: Move person to fresh air. If necessary give artificial respiration or oxygen. Call a doctor if in distress.

Ingestion: Do not induce vomiting. Dilute with large quantity of water or milk. Contact a physician immediately.

Eye Contact: Immediately flush eyes with plenty of water, holding lids open to wash entire surface of eye. Contact a physician immediately.

Skin Contact: Immediately flush skin for at least 15 minutes. Launder clothing before reuse. Contact a physician if irritation persists.

Prep./Revised Date: January 8, 2010

Prepared By: R. Russell

Source Material: Manufacturer's MSDS

Emergency Response: 1-613-996-6666 (Transport Emergencies)

Mailing Address: Esteam Manufacturing Ltd.
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This information is complete to the best of our knowledge, however, users are encouraged to make their own investigations into the suitability of the information to their particular purposes. READ THE LABEL before using this or any product, and take any necessary precautions, dictated by the label or by common sense to ensure that your health is protected.