

MSDS Number: B0034 * * * * * Effective Date: 06/28/06 * * * * * Supercedes: 06/29/01

MSDS Material Safety Data Sheet

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865



24 Hour Emergency Telephone: 908-859-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. And Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-562-2537) for assistance.

BakerClean® JTB -111 FEOL Cleaner

1. Product Identification

Synonyms: BakerClean® JTB -111FEOL Cleaner, Patented

CAS No.: Not applicable to mixtures.

Molecular Weight: Not applicable to mixtures.

Chemical Formula: Not applicable to mixtures.

Product Codes: 6422, 6432

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Water	7732-18-5	89 - 99%	No
Alkylammonium hydroxide, TSRN004314011-5036	N/A	< 5%	Yes
Proprietary Component, TSRN004314011-5037	N/A	< 5%	Yes
Proprietary Component, TSRN004314011-5041	N/A	< 1%	No

3. Hazards Identification

Emergency Overview

POISON! DANGER! CORROSIVE ALKALINE SOLUTION. CAUSES BURNS TO ANY AREA OF CONTACT. MAY BE FATAL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 3 - Severe (Poison)

Flammability Rating: 0 - None

Reactivity Rating: 1 - Slight

Contact Rating: 4 - Extreme (Corrosive)

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES

Storage Color Code: White (Corrosive)

Potential Health Effects

Alkylammonium hydroxide: Exposure may result in intense burning of the eyes, nose, throat, lungs and skin. Experimental studies have indicated that the alkylammonium hydroxide is a weak inhibitor of acetylcholinesterase and acts as a cholinergic (muscarinic and nicotinic) agonist. Depending on the level and duration of exposure, signs and symptoms may include blurred or double vision; pinpoint pupils; changes in heart rate and blood pressure; abdominal cramping, nausea and vomiting; diarrhea, excessive salivation sweating or bronchial secretions; urinary incontinence; muscle twitching, tremors or convulsions. Other symptoms consistent with cholinergic activity may also be observed.

Inhalation:

Corrosive. Inhalation produces damaging effects on the mucous membranes and upper respiratory tract.

Ingestion:

Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach, leading to death. Can cause sore throat, vomiting, diarrhea.

Skin Contact:

Corrosive. Symptoms of redness, pain, and severe burn can occur. May be absorbed through the skin with possible systemic effects.

Eye Contact:

Corrosive. Can cause blurred vision, redness, pain, severe tissue burns and eye damage.

Chronic Exposure:

Prolonged or repeated skin exposure may cause dermatitis.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything

by mouth to an unconscious person. Get medical attention immediately.

Skin 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. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Note to Physician:

Treat as alkali burn.

5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Do not flush caustic residues to the sewer. Residues from spills can be diluted with water, neutralized with dilute acid such as acetic, hydrochloric or sulfuric. Absorb neutralized caustic residue on clay, vermiculite or other inert substance and package in a suitable container for disposal.

7. Handling and Storage

Protect from freezing. Keep in a tightly closed container. Store in a cool, dry, corrosion-proof, ventilated area away from moisture, sources of heat or ignition, combustibles and oxidizers. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to the substance is apparent, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

Clear, colorless liquid.

Odor:

Amine-like odor.

Solubility:

Complete (100%)

Specific Gravity:

1.02

pH:

9.6

% Volatiles by volume @ 21C (70F):

No information found.

Boiling Point:

96C (205F)

Melting Point:

0C (32F)

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage. Readily absorbs CO₂ from the air.

Hazardous Decomposition Products:

Carbon monoxide, ammonia, volatile amines, nitrogen oxides, and alcohols.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Strong acids.

Conditions to Avoid:

Heat, boiling temperatures.

11. Toxicological Information

Alkylammonium hydroxide: skin guinea pig LD₅₀ = 25 mg/kg

Preliminary results from an experimental study in rats demonstrated lethality following one or more skin applications of alkylammonium hydroxide at dose levels of 50 mg/kg and higher.

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Water (7732-18-5)	No	No	None
Alkylammonium hydroxide, TSRN004314011-5036	No	No	None
Proprietary Component, TSRN004314011-5037	No	No	None
Proprietary Component, TSRN004314011-5041	No	No	None

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Domestic (Land, D.O.T.)

Proper Shipping Name: CORROSIVE LIQUIDS, BASIC, ORGANIC, N.O.S.
 (ALKYLAMMONIUM HYDROXIDE)

Hazard Class: 8

UN/NA: UN3267

Packing Group: II

Information reported for product/size: 430LB

International (Water, I.M.O.)

Proper Shipping Name: CORROSIVE LIQUIDS, BASIC, ORGANIC, N.O.S.
 (ALKYLAMMONIUM HYDROXIDE)

Hazard Class: 8

UN/NA: UN3267

Packing Group: II

Information reported for product/size: 430LB

International (Air, I.C.A.O.)

Proper Shipping Name: CORROSIVE LIQUIDS, BASIC, ORGANIC, N.O.S.
 (ALKYLAMMONIUM HYDROXIDE)

Hazard Class: 8

UN/NA: UN3267

Packing Group: II

Information reported for product/size: 430LB

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan	Australia
Water (7732-18-5)	Yes	Yes	Yes	Yes
Alkylammonium hydroxide, TSRN004314011-5036	Yes	Yes	Yes	Yes
Proprietary Component, TSRN004314011-5037	Yes	Yes	Yes	Yes
Proprietary Component, TSRN004314011-5041	Exempt	Yes	No	No

-----\Chemical Inventory Status - Part 2\-----

Ingredient	Korea	--Canada--		Phil.
		DSL	NDSL	
Water (7732-18-5)	Yes	Yes	No	Yes
Alkylammonium hydroxide, TSRN004314011-5036	Yes	Yes	No	Yes
Proprietary Component, TSRN004314011-5037	Yes	Yes	No	Yes
Proprietary Component, TSRN004314011-5041	No	Yes	No	No

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
Water (7732-18-5)	No	No	No	No
Alkylammonium hydroxide, TSRN004314011-5036	No	No	No	No
Proprietary Component, TSRN004314011-5037	No	No	No	No
Proprietary Component, TSRN004314011-5041	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8 (d)
Water (7732-18-5)	No	No	No
Alkylammonium hydroxide, TSRN004314011-5036	No	No	No
Proprietary Component, TSRN004314011-5037	5000	No	No
Proprietary Component, TSRN004314011-5041	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No
Reactivity: No (Mixture / Liquid)

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 3 Flammability: 0 Reactivity: 0

Label Hazard Warning:

POISON! DANGER! CORROSIVE ALKALINE SOLUTION. CAUSES BURNS TO ANY AREA OF CONTACT. MAY BE FATAL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.

Label Precautions:

Do not breathe vapor or mist.
Do not get in eyes, on skin, or on clothing.
Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.

Label First Aid:

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to

an unconscious person. In all cases get medical attention immediately.

Product Use:

Microelectronics Cleaner.

Revision Information:

MSDS Section(s) changed since last revision of document include: 14, 16.

Disclaimer:

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