MSDS Number: **A7596** * * * * * *Effective Date:* ***11/12/03*** * * * * * *Supercedes:* ***02/23/01***

MSDS Material Safety Data Sheet

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

J.T.Baker®

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 (1-800-582-2537) for assistance.

ASCARITE II®

1. Product Identification

Synonyms: Sodium Hydroxide Coated Non-Fibrous Silicate
CAS No.: Not applicable to mixtures.
Molecular Weight: Not applicable to mixtures.
Chemical Formula: Not applicable to mixtures.
Product Codes: 0928, 0930, 0931

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Sodium Hydroxide	1310-73-2	90 - 95%	Yes
Vermiculite	1318-00-9	5 - 10%	Yes

3. Hazards Identification

Emergency Overview

POISON! DANGER! CORROSIVE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. CAUSES BURNS TO ANY AREA OF CONTACT.

J.T. Baker SAF-T-DATA(tm) Ratings (Provided here for your convenience)

Health Rating: 3 - Severe (Poison)
Flammability Rating: 0 - None
Reactivity Rating: 2 - Moderate
Contact Rating: 4 - Extreme (Corrosive)
Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES
Storage Color Code: White Stripe (Store Separately)

Potential Health Effects

The health effects from exposure to sodium hydroxide are described below.

Inhalation:
Severe irritant. Effects from inhalation of dust or mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat or runny nose. Severe pneumonitis may occur.
Ingestion:
Corrosive! Swallowing may cause severe burns of mouth, throat, and stomach. Severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhea, fall in blood pressure. Damage may appears days after exposure.
Skin Contact:
Corrosive! Contact with skin can cause irritation or severe burns and scarring with greater exposures.
Eye Contact:
Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.
Chronic Exposure:
Prolonged contact with dilute solutions or dust has a destructive effect upon tissue.
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:
Perform endoscopy in all cases of suspected sodium hydroxide ingestion. In cases of severe esophageal corrosion, the use of therapeutic doses of steroids should be considered. General supportive measures with continual monitoring of gas exchange, acid-base balance, electrolytes, and fluid intake are also required.

5. Fire Fighting Measures

Fire:
Not considered to be a fire hazard. Contact with moisture or water may generate sufficient heat to ignite combustible materials.
Explosion:
Not considered to be an explosion hazard. Reacts with most metals to produce hydrogen gas, which can form an explosive mixture with air.
Fire Extinguishing Media:
Use any means suitable for extinguishing surrounding fire. Adding water to caustic solution generates large

amounts of heat.
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. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. 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.
US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Do not store with aluminum or magnesium. Do not mix with acids or organic materials. Always add the caustic to water while stirring; never the reverse. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:
Sodium hydroxide [1310-73-2]:

-OSHA Permissible Exposure Limit (PEL):
2mg/m3 Ceiling

-ACGIH Threshold Limit Value (TLV):
2mg/m3 Ceiling
Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. 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):
If the exposure limit is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. 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 full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:
Tan granules.
Odor:
Odorless.
Solubility:
Appreciable (> 10%)
Specific Gravity:
0.90
pH:
No information found.
% Volatiles by volume @ 21C (70F):
0
Boiling Point:
No information found.
Melting Point:
No information found.
Vapor Density (Air=1):
Not applicable.
Vapor Pressure (mm Hg):
Not applicable.
Evaporation Rate (BuAc=1):
No information found.

10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage.
Solid sodium hydroxide: Very hygroscopic. Can slowly pick up moisture from air and react with carbon dioxide from air to form sodium carbonate.
Hazardous Decomposition Products:
Oxides of silicon and sodium may form when heated to decomposition.
Hazardous Polymerization:
Will not occur.
Incompatibilities:
For Sodium Hydroxide: Contact with water, acids, flammable liquids, and organic halogen compounds, especially trichloroethylene, may cause fire or explosion. Contact with nitromethane and other similar nitro compounds causes formation of shock-sensitive salts. Contact with metals such as aluminum, tin, and zinc causes formation of flammable hydrogen gas.
Conditions to Avoid:
Moisture, dusting and incompatibles.

11. Toxicological Information

Sodium hydroxide: Irritation data: skin, rabbit: 500 mg/24H severe; eye, rabbit: 50 ug/24 H severe; investigated as a mutagen.

--------\Cancer Lists\----------

---NTP Carcinogen---

Ingredient	Known	Anticipated	IARC Category
Sodium Hydroxide (1310-73-2)	No	No	None
Vermiculite (1318-00-9)	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: SODIUM HYDROXIDE, MIXTURE
Hazard Class: 8
UN/NA: UN1823
Packing Group: II
Information reported for product/size: 500G

International (Water, I.M.O.)

Proper Shipping Name: SODIUM HYDROXIDE, MIXTURE
Hazard Class: 8
UN/NA: UN1823
Packing Group: II
Information reported for product/size: 500G

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

Proper Shipping Name: SODIUM HYDROXIDE, MIXTURE
Hazard Class: 8
UN/NA: UN1823
Packing Group: II
Information reported for product/size: 500G

15. Regulatory Information

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

Ingredient	TSCA	EC	Japan	Australia
Sodium Hydroxide (1310-73-2)	Yes	Yes	Yes	Yes
Vermiculite (1318-00-9)	Exempt	No	Yes	Yes

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

Ingredient	Korea	--Canada-- DSL	NDSL	Phil.
Sodium Hydroxide (1310-73-2)	Yes	Yes	No	Yes
Vermiculite (1318-00-9)	Yes	No	No	No

--------\Federal, State & International Regulations - Part 1\----------

Ingredient	-SARA 302- RQ	TPQ	------SARA 313------ List	Chemical Catg.
Sodium Hydroxide (1310-73-2)	No	No	No	No
Vermiculite (1318-00-9)	No	No	No	No

--------\Federal, State & International Regulations - Part 2\----------

Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
Sodium Hydroxide (1310-73-2)	1000	No	No
Vermiculite (1318-00-9)	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 / Solid)

Australian Hazchem Code: 2R
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: **1**
Label Hazard Warning:
POISON! DANGER! CORROSIVE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. CAUSES BURNS TO ANY AREA OF CONTACT.
Label Precautions:
Wash thoroughly after handling.
Do not get in eyes, on skin, or on clothing.
Do not breathe vapor or mist.
Keep container closed.
Use only with adequate ventilation.
Label First Aid:
If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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. In all cases get medical attention immediately.
Product Use:
Laboratory Reagent.
Revision Information:
No Changes.
Disclaimer:
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Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

Product Details

Click on the Image or the ENLARGE IMAGE button to view full size Image.

SEARCH TIPS

Chemicals >A

Ascarite II® Thomas

Sodium Hydroxide Coated Non-fibrous Silicate, Carbon dioxide Absorbent, Self-indicating Quantitative Determination of Carbon in Steel and Organic Compounds

Carbon dioxide absorbent: self-indicating. A sodium hydroxide/non-fibrous silicate formulation for the quantitative absorption of carbon dioxide in the determination of carbon in steel and organic compounds by the direction combustion method. Can be used in any absorption bulb designed for use with a solid absorbent. Carbon dioxide absorption capacity 20 to 30% W/W.

Also suitable for use in carbon-hydrogen determinations, particularly in quantitative organic microanalysis, and in the analysis of respiratory gases, vapor phase chromatography, absorption of nitrogen dioxide, etc. Because of its high scavenging capacity for acidic gases and the relatively high flow rates which it will permit without channeling, Ascarite II is recommended for industrial pilot plant and small scale production work. C049F55, H65, and U97 Ascarite II are bulk-packed in plastic-lined drums containing 50kg.

For analytical work, an additional drying agent is used following Ascarite II to absorb water evolved in the absorption of carbonic gases. For this purpose we recommend Dehydrite, an anhydrous salt found to be highly effective. During use, the light brown Ascarite II gradually turns white due to absorption of carbon dioxide and formation of sodium carbonate. Change is clearly seen, indicating saturation and showing when spent material should be discarded.

NOTE: Mesh sizes given in listings are approximate

Description:4-10 Mesh

Catalog #	Manufacturer	Man. #	Size	Shp.	Pkg.	Price	QTY
C049F55	THOMAS SCIENTIFIC	C049F55	50 kg	h	pc	$5,970.00	

BACK VIEW CART ADD TO CART

Description:8-20 Mesh

Catalog #	Manufacturer	Man. #	Size	Shp.	Pkg.	Price	QTY
C049H40	THOMAS SCIENTIFIC	C049H40	500 g	h	pl	$150.00	
C049H42	THOMAS SCIENTIFIC	C049H42	12 x 500 g	h	pl	$1,800.00	
C049H65	THOMAS SCIENTIFIC	C049H65	50 kg	h	pc	$5,970.00	

BACK VIEW CART ADD TO CART

Description:20-30 Mesh

Catalog #	Manufacturer	Man. #	Size	Shp.	Pkg.	Price	QTY
C049U90	THOMAS SCIENTIFIC	C049U90	500 g	h	pl	$150.00	
C049U92	THOMAS SCIENTIFIC	C049U92	12 x 500 g	h	pl	$1,800.00	
C049U97	THOMAS SCIENTIFIC	C049U97	50 kg	h	pc	$5,970.00	

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