DOBER RESEARCH WORKS

Material Safety Data Sheet

Dober - Brite

1. Product and company identification

Common name	: **Dober - Brite**
Code	: 000514
Material uses	: Industrial and Institutional laundering.
Supplier/Manufacturer	: Dober 11230 Katherine's Crossing Woodridge, IL, 60517-5075
In case of emergency	: ChemTel : 1-813-248-0585 / 1-800-255-3924
MSDS authored by:	: Atrion Regulatory Services, Inc. **9/28/2007.**

2. Hazards identification

Physical state	: Liquid.
Odor	: Mild.
Color	: Colorless.
Hazard status	: This material is classified hazardous under OSHA regulations in the United States, the WHMIS Controlled Product Regulation in Canada and the NOM-018-STPS-2000 in Mexico.
Emergency overview	: DANGER! CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS. Corrosive to the eyes, skin and respiratory system. Causes burns. Do not breathe vapor or mist. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Routes of entry	: Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects	
Eyes	: Corrosive to eyes. Causes burns.
Skin	: Corrosive to the skin. Causes burns.
Inhalation	: Corrosive to the respiratory system.
Ingestion	: May cause burns to mouth, throat and stomach.
Potential chronic health effects	: Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH. Mutagenic effects: Not available. Teratogenic effects: Not available.
Medical conditions aggravated by over-exposure	: Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated skin exposure can produce local skin destruction or dermatitis.

See toxicological information (section 11)

3. Composition/information on ingredients

United States

Name	CAS number	%
Sodium hydroxide	1310-73-2	30 - 60

Canada

Name	CAS number	%
Sodium hydroxide	1310-73-2	30 - 60

Mexico

Name	UN number	IDLH	Classification H	F	R	Special	CAS number	%
Sodium hydroxide	UN1823	10 mg/m³	3	0	0		1310-73-2	30 - 60

4. First aid measures

Eye contact : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. 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 : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Notes to physician : No specific antidote. Medical staff must contact Poison Control Center.

5. Fire-fighting measures

Flammability of the product : Not expected to be a fire hazard.

Products of combustion : Decomposition products may include the following materials: metal oxide/oxides

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

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.

6. Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions : Avoid dispersal of spilled 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 : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7 . Handling and storage

Handling : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

United States	
Product name	**Exposure limits**
Sodium hydroxide	**ACGIH TLV (United States, 1/2006).** CEIL: 2 mg/m³ **NIOSH REL (United States, 12/2001).** CEIL: 2 mg/m³ **OSHA PEL (United States, 11/2006).** TWA: 2 mg/m³ 8 hour(s).

Canada	
Product name	**Exposure limits**
Sodium hydroxide	**ACGIH TLV (United States, 1/2006).** CEIL: 2 mg/m³

Mexico	
Product name	**Exposure limits**
Sodium hydroxide	**NOM-010-STPS (Mexico, 9/2000).** LMPE-Pico: 2 mg/m³

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor 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.

Personal protection

Eyes : Face shield.

Skin : Synthetic apron.

Respiratory : A respirator is not needed under normal and intended conditions of product use.

Hands : Nitrile gloves.

HMIS Code/Personal protective equipment : D

Personal protection in case of a large spill	: Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear.
Hygiene measures	: Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. Follow good industrial hygiene practice.

9 . Physical and chemical properties

Physical state	: Liquid.
Color	: Colorless.
Odor	: Mild.
pH	: <13
Boiling/condensation point	: 121.11°C (250°F)
Relative density	: 1.37
Vapor density	: >1 [Air = 1]
Evaporation rate	: >1 (Butyl acetate. = 1)
Solubility	: Miscible in water.

10 . Stability and reactivity

Stability and reactivity	: The product is stable.
Incompatibility with various substances	: Highly reactive or incompatible with the following materials: moisture. Reactive or incompatible with the following materials: oxidizing materials, metals and acids.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Will not occur.
Conditions of reactivity	: Hot material may react violently with water. Can react with certain metals, such as aluminum, to produce flammable hydrogen gas.

11 . Toxicological information

Acute Effects

Eyes	: Corrosive to eyes. Causes burns.
Skin	: Corrosive to the skin. Causes burns.
Inhalation	: Corrosive to the respiratory system.
Ingestion	: May cause burns to mouth, throat and stomach.
Potential chronic health effects	: Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH. Mutagenic effects: Not available. Teratogenic effects: Not available.

12 . Ecological information

Environmental precautions	: No known significant effects or critical hazards.
Products of degradation	: Some metallic oxides.

13 . Disposal considerations

Waste disposal	: The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14 . Transport information

NAERG : 154

Regulatory information	Proper shipping name	Class	UN number	PG	Label
UN / IMDG / IATA Classification	SODIUM HYDROXIDE SOLUTION	8	UN1824	II	
DOT Classification	SODIUM HYDROXIDE SOLUTION	8	UN1824	II	
TDG Classification	SODIUM HYDROXIDE SOLUTION	8	UN1824	II	

15 . Regulatory information

United States

HCS Classification : Corrosive material

U.S. Federal regulations : **United States inventory (TSCA 8b):** All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Sodium hydroxide
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Sodium hydroxide: Immediate (acute) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: Sodium hydroxide

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations : **Connecticut Carcinogen Reporting**: None of the components are listed.
Connecticut Hazardous Material Survey: None of the components are listed.
Florida substances: None of the components are listed.
Illinois Chemical Safety Act: None of the components are listed.
Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.
Louisiana Reporting: None of the components are listed.
Louisiana Spill: None of the components are listed.
Massachusetts Spill: None of the components are listed.
Massachusetts Substances: The following components are listed: Sodium hydroxide
Michigan Critical Material: None of the components are listed.
Minnesota Hazardous Substances: None of the components are listed.
New Jersey Hazardous Substances: The following components are listed: Sodium hydroxide
New Jersey Spill: None of the components are listed.
New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
New York Acutely Hazardous Substances: The following components are listed: Sodium hydroxide
New York Toxic Chemical Release Reporting: None of the components are listed.
Pennsylvania RTK Hazardous Substances: The following components are listed: Sodium hydroxide
Rhode Island Hazardous Substances: None of the components are listed.

California prop. 65: No products were found.

Canada

WHMIS (Canada) : Class E: Corrosive material

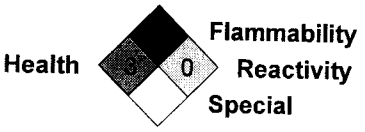
Canada inventory : **Canada inventory:** All components are listed or exempted.

CEPA Toxic substances: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: None of the components are listed.
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

This product has been classified in accordance with the hazard criteria of the Canadian CPR, the United States OSHA and the Mexican NOM -018-STPS-2000. This MSDS contains all the information required by the CPR, OSHA, the American National Standard Institute (ANSI) Z400.1 and NOM -018-STPS-2000.

Mexico

Classification :



HAZARD RATINGS

4- Extreme
3- Serious
2- Moderate
1- Slight
0- Minimal

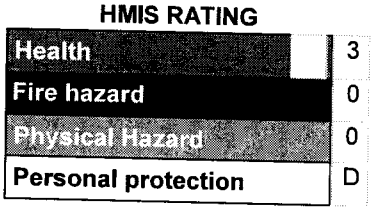
International regulations

International lists : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16 . Other information

Label requirements (U.S.A.) : CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS.

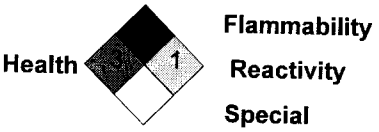
Hazardous Material Information System (U.S.A.) :



HAZARD RATINGS

4- Extreme
3- Serious
2- Moderate
1- Slight
0- Minimal
See section 8 for more detailed information on personal protection.

National Fire Protection Association (U.S.A.) :



References : ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005. - Official Mexican Standards NOM-018-STPS-2000 and NOM-004-SCT2-1994.

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.