

SECTION 1: IDENTIFICATION

1.1. IDENTIFICATION

Product form : Mixtures
Product name : Daraclean 200

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Recommended use : Non-Destructive Testing.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Manufacturer

Magnaflux
155 Harlem Ave.
Glenview, IL 60025 - USA
T 847-657-5300

Distributor

1.4. EMERGENCY TELEPHONE NUMBER

Emergency number : CHEMTREC 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

The hazards given in this SDS apply to the product at full concentration. By diluting the product, the hazards will be reduced. It is up to the employer/user to determine the proper personal protection equipment and safety precautions when using diluted product.

GHS classification

Skin Corr. 1B
Eye Dam. 1
Skin Sens. 1
Carc. 2
Repr. 1B
STOT RE 1
(H)HNOC 1

2.2. LABEL ELEMENTS

GHS labelling

Hazard pictograms (GHS) :



GHS05



GHS07



GHS08

Signal word (GHS) :

Danger

Hazard statements (GHS) :

Causes severe skin burns and eye damage. May cause an allergic skin reaction. May damage fertility or the unborn child. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. Causes severe damage to the respiratory tract.

Precautionary statements (GHS) :

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands, forearms and face thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing must not be allowed out of the workplace. Do not breathe dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. If exposed or concerned: Get medical advice/attention. If swallowed: rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Store locked up. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. OTHER HAZARDS

No additional information available

2.4. UNKNOWN ACUTE TOXICITY

Not applicable

Prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. SUBSTANCE**

Not applicable

3.2. MIXTURES

Name	Product identifier	%
Potassium hydroxide	(CAS No) 1310-58-3	2.30
Diethanolamine	(CAS No) 111-42-2	1.40
Alcohols, C8-10, ethoxylated propoxylated	(CAS No) 68603-25-8	1.30
Boric acid	(CAS No) 10043-35-3	1.28
Ethanolamine	(CAS No) 141-43-5	1.15
D-Limonene	(CAS No) 5989-27-5	0.20

SECTION 4: FIRST AID MEASURES**4.1. DESCRIPTION OF FIRST AID MEASURES**

- First-aid measures after inhalation : If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
- First-aid measures after ingestion : IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER or doctor.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- Symptoms/injuries after inhalation : Causes severe damage to the respiratory tract.
- Symptoms/injuries after skin contact : Causes severe burns. Symptoms may include redness, pain, blisters. May cause an allergic skin reaction.
- Symptoms/injuries after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: FIREFIGHTING MEASURES**5.1. EXTINGUISHING MEDIA**

- Suitable extinguishing media : Dry chemical. Carbon dioxide. Foam.
- Unsuitable extinguishing media : Do not use water.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon, oxides of nitrogen, oxides of sulfur.
- Reactivity : No dangerous reactions known under normal conditions of use.

5.3. ADVICE FOR FIREFIGHTERS

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Cool closed containers exposed to fire with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Do not get in eyes, on skin, or on clothing. Spilled material may present a slipping hazard.

6.1.1. FOR NON-EMERGENCY PERSONNEL

No additional information available

6.1.2. FOR EMERGENCY RESPONDERS

No additional information available

Prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

6.2. ENVIRONMENTAL PRECAUTIONS

Prevent entry to sewers and public waters.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

For containment : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. REFERENCE TO OTHER SECTIONS

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Do not swallow. Do not breathe dust, fume, gas, mist, spray, vapours. Use only in well-ventilated areas. Handle and open container with care. Do not eat, drink or smoke when using this product.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a well-ventilated place. Store locked up. Store at temperatures between 4 - 38° C (40 - 100° F).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

Potassium hydroxide (1310-58-3)		
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
NIOSH	NIOSH REL (ceiling) (mg/m ³)	2 mg/m ³
Diethanolamine (111-42-2)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ (inhalable fraction and vapor)
NIOSH	NIOSH REL (TWA) (mg/m ³)	15 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	3 ppm
Manufacturer IHG	TWA (mg/m ³)	0.2 mg/m ³
Alcohols, C8-10, ethoxylated propoxylated (68603-25-8)		
Not applicable		
Boric acid (10043-35-3)		
ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (inhalable particulate matter, listed under Borate compounds, inorganic)
ACGIH	ACGIH STEL (mg/m ³)	6 mg/m ³ (inhalable particulate matter, listed under Borate compounds, inorganic)
Ethanolamine (141-43-5)		
ACGIH	ACGIH TWA (ppm)	3 ppm
ACGIH	ACGIH STEL (ppm)	6 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	6 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	3 ppm
IDLH	US IDLH (ppm)	30 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	8 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	3 ppm
NIOSH	NIOSH REL (STEL) (mg/m ³)	15 mg/m ³
NIOSH	NIOSH REL (STEL) (ppm)	6 ppm

Prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

D-Limonene (5989-27-5)

Not applicable

8.2. EXPOSURE CONTROLS

Appropriate engineering controls	: Ensure good ventilation of the work station.
Hand protection	: Wear suitable gloves resistant to chemical penetration.
Eye protection	: Wear eye/face protection.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid
Appearance	: Clear / Hazy
Colour	: Yellow
Odour	: Citrus
Odour threshold	: No data available
pH	: 11 - 13
Melting point	: No data available
Freezing point	: No data available
Boiling point	: Initial : 100 °C (212 °F)
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: 24 mm Hg at 20 °C (68 °F)
Relative vapour density at 20 °C	: No data available
Relative density	: 1.1
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. OTHER INFORMATION

VOC content	: 0 g/l
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SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

No dangerous reactions known under normal conditions of use.

10.2. CHEMICAL STABILITY

Stable under normal conditions.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reactions known under normal conditions of use.

10.4. CONDITIONS TO AVOID

Heat. Incompatible materials.

Prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

10.5. INCOMPATIBLE MATERIALS

Nitrites. Strong oxidizers.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

May include, and are not limited to: oxides of carbon, oxides of nitrogen, oxides of sulfur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity (oral) : Not classified.
Acute toxicity (dermal) : Not classified.
Acute toxicity (inhalation) : Not classified.

Daraclean 200	
LD50 oral rat	> 2000 mg/kg (Calculated acute toxicity estimate)
LD50 dermal rabbit	> 2000 mg/kg (Calculated acute toxicity estimate)
LC50 inhalation rat	> 20 mg/l/4h (Calculated acute toxicity estimate)

Potassium hydroxide (1310-58-3)	
LD50 oral rat	284 mg/kg

Diethanolamine (111-42-2)	
LD50 oral rat	780 mg/kg

Boric acid (10043-35-3)	
LD50 oral rat	2660 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 0.16 mg/l/4h

Ethanolamine (141-43-5)	
LD50 oral rat	1720 mg/kg
LD50 dermal rabbit	1000 mg/kg

D-Limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg
LD50 dermal rabbit	> 5 g/kg

Skin corrosion/irritation : Causes severe skin burns.
pH: 11 - 13
Serious eye damage/irritation : Causes serious eye damage.
pH: 11 - 13
Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified.
Carcinogenicity : Suspected of causing cancer.

Diethanolamine (111-42-2)	
IARC group	2B - Possibly carcinogenic to humans
In OSHA Hazard Communication Carcinogen list	Yes

D-Limonene (5989-27-5)	
IARC group	3 - Not classifiable
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity

Reproductive toxicity : May damage fertility or the unborn child.
STOT-single exposure : Not classified.
STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard : Not classified.
Symptoms/injuries after inhalation : Causes severe damage to the respiratory tract.
Symptoms/injuries after skin contact : Causes severe burns. Symptoms may include redness, pain, blisters. May cause an allergic skin reaction.

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Symptoms/injuries after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
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Diethanolamine (111-42-2)	
LC50 fish 1	4460 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	55 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	1200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 other aquatic organisms 2	2.1 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)

Boric acid (10043-35-3)	
EC50 Daphnia 1	115 - 153 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Ethanolamine (141-43-5)	
LC50 fish 1	227 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	65 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	3684 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])

D-Limonene (5989-27-5)	
LC50 fish 1	0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)

12.2. PERSISTENCE AND DEGRADABILITY

Daraclean 200	
Persistence and degradability	Biodegradable.

12.3. BIOACCUMULATIVE POTENTIAL

Daraclean 200	
Bioaccumulative potential	Not established.

Potassium hydroxide (1310-58-3)	
Partition coefficient n-octanol/water	0.65

Diethanolamine (111-42-2)	
BCF fish 1	(no significant bioconcentration)
Partition coefficient n-octanol/water	-2.18 (at 25 °C)

Boric acid (10043-35-3)	
BCF fish 1	0
Partition coefficient n-octanol/water	-0.757 (at 25 °C)

Ethanolamine (141-43-5)	
Partition coefficient n-octanol/water	-1.91 (at 25 °C)

12.4. MOBILITY IN SOIL

No additional information available

12.5. OTHER ADVERSE EFFECTS

Effect on the global warming	: No known effects from this product.
Other information	: No other effects known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

Product/Packaging disposal recommendations	: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.
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Prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

SECTION 14: TRANSPORT INFORMATION

In accordance with DOT/TDG/IATA/IMDG

DOT (bulk)	: UN1760 Corrosive liquids, n.o.s. (Potassium hydroxide; Monoethanolamine), 8, II
DOT (non-bulk)	: UN1760 Corrosive liquids, n.o.s. (Potassium hydroxide; Monoethanolamine), 8, II
Transportation of Dangerous Goods	: UN1760 Corrosive liquids, n.o.s. (Potassium hydroxide; Monoethanolamine), 8, II
IATA	: Prohibited
IMDG	: UN1760 Corrosive liquids, n.o.s. (Potassium hydroxide; Monoethanolamine), 8, II

SECTION 15: REGULATORY INFORMATION

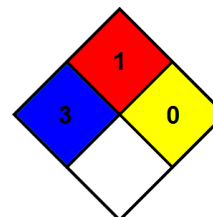
15.1. FEDERAL REGULATIONS

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

Potassium hydroxide (1310-58-3)	
CERCLA RQ	1000 lb
Diethanolamine (111-42-2)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1 %
Alcohols, C8-10, ethoxylated propoxylated (68603-25-8)	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

NFPA health hazard	: 3
NFPA fire hazard	: 1
NFPA reactivity	: 0



15.2. INTERNATIONAL REGULATIONS

No additional information available

15.3. US STATE REGULATIONS

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

Diethanolamine (111-42-2)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	No	No	No	

Potassium hydroxide (1310-58-3)	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S. - Pennsylvania - RTK (Right to Know) List	

Diethanolamine (111-42-2)	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S. - Pennsylvania - RTK (Right to Know) List	

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Ethanolamine (141-43-5)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION

Revision date : 12/27/2016
Other information : None.
Prepared by : Nexreg Compliance Inc.
www.Nexreg.com



SDS HazCom 2012 - WHMIS 2015 Nexreg Magnaflux

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