

---

**Section 1: IDENTIFICATION**

---

**1.1 PRODUCT IDENTIFIER****Product Name:** Daraclean 282 GF**Product Code:** Not available.**1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE****Use:** Non-Destructive Testing.**1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET****Name/Address:** Magnaflux  
155 Harlem Ave.  
Glenview, IL  
60025**Telephone Number:** 847-657-5300**1.4 EMERGENCY TELEPHONE NUMBER****Emergency Telephone Number:** CHEMTREC 800-424-9300**Date of Preparation:** December 2, 2014**Revision date:** November 17, 2015 **Version #:** 2.1

---

**Section 2: HAZARD(S) IDENTIFICATION**

---

**2.1 CLASSIFICATION OF THE CHEMICAL ACCORDING TO OSHA HAZCOM 2012****Hazard class**Skin irritation 2  
Serious eye damage 1  
Skin Sensitization 1**2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM 2012****Hazard Pictogram:****Signal Word:** Danger**Hazard Statement:** Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction.**Prevention:** Wash hands thoroughly after handling. Wear protective gloves/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace.**Response:** If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. 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.

**Storage:** Not applicable.

**Disposal:** Dispose of contents and container in accordance with all local, regional, national and international regulations.

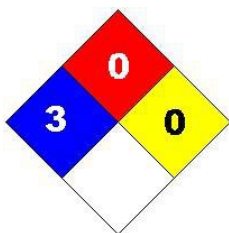
### 2.3 ADDITIONAL INFORMATION

**Hazards not otherwise classified:** Not applicable.

**Unknown acute toxicity:** Not applicable.

This product is a hazardous chemical as defined by NOM-018-STPS-2000.

**Mexico Classification:**



**Blue = Health Red = Flammability Yellow = Reactivity White = Special**

**Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

**WHMIS Classification(s):**

Class D2B - Skin/Eye Irritant

**WHMIS Hazard Symbols:**



**WHMIS Signal Word:** WARNING

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 MIXTURES

Ingredient	UN #	H / F / R / *	CAS No	Wt. %
Alcohols, C8-10, ethoxylated propoxylated	Not available.	Not available.	68603-25-8	1 - 5
Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramethylbutyl)phenoxy]-	Not available.	Not available.	60864-33-7	1 - 5
Carboxylic acid amine salt	Not available.	Not available.	RR-10545-3	0.5 - 1.5
Triethanolamine	Not available.	Not available.	102-71-6	0.5 - 1.5
Potassium hydroxide	UN1814	3/0/1	1310-58-3	0.1 - 1
Monoethanolamine	UN2491	3/2/0	141-43-5	0.1 - 1
Citrus extracts (citrus terpenes)	Not available.	Not available.	94266-47-4	0.1 - 1
Benzothiazole-2-thiol	Not available.	Not available.	149-30-4	0.1 - 1

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

\* Per NOM-018-STPS-2000

---

**Section 4: FIRST- AID MEASURES**

---

**4.1 DESCRIPTION OF THE FIRST AID MEASURE**

<b>Eye:</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.
<b>Skin:</b>	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
<b>Inhalation:</b>	If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
<b>Ingestion:</b>	If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

<b>Eye:</b>	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.
<b>Skin:</b>	Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause sensitization by skin contact.
<b>Inhalation:</b>	May cause respiratory tract irritation.
<b>Ingestion:</b>	May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

**4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED**

<b>Note to Physicians:</b>	Symptoms may not appear immediately.
<b>Specific Treatments:</b>	In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

---

**Section 5: FIRE-FIGHTING MEASURES**

---

**5.1 FLAMMABILITY**

<b>Flammability:</b>	Not flammable by WHMIS/OSHA/NOM-018-STPS-2000 criteria.
----------------------	---

**5.2 EXTINGUISHING MEDIA**

<b>Suitable Extinguishing Media:</b>	Powder, water spray, foam, carbon dioxide.
<b>Unsuitable Extinguishing Media:</b>	Do not use a solid water stream as it may scatter and spread fire.

**5.3 SPECIAL HAZARDS ARISING FROM THE CHEMICAL**

<b>Products of Combustion:</b>	May include, and are not limited to: oxides of carbon.
<b>Explosion Data:</b>	
<b>Sensitivity to Mechanical Impact:</b>	Not available.
<b>Sensitivity to Static Discharge:</b>	Not available.

#### 5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool.

### Section 6: ACCIDENTAL RELEASE MEASURES

#### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Avoid contact with skin and eyes.

#### 6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING - UP

**Methods for Containment:** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

**Methods for Cleaning-Up:** Scoop up material and place in a disposal container. Provide ventilation.

### Section 7: HANDLING AND STORAGE

#### 7.1 PRECAUTIONS FOR SAFE HANDLING

**Handling:** Avoid contact with skin and eyes. Do not swallow. Avoid breathing dust/fume/gas/mist/vapors/spray. Handle and open container with care. Do not eat, drink or smoke when using this product. (See section 8)

**General Hygiene Advice:** Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

#### 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

**Storage:** Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Store between 4 °C (40 °F) and 38 °C (100 °F). (See section 10)

### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 CONTROL PARAMETERS

##### Exposure Guidelines

Ingredient	Occupational Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Alcohols, C8-10, ethoxylated propoxylated	Not available.	Not available.
Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramethylbutyl)phenoxy]-	Not available.	Not available.
Carboxylic acid amine salt	Not available.	Not available.
Triethanolamine	Not available.	5 mg/m <sup>3</sup>
Potassium hydroxide	Not available.	2 mg/m <sup>3</sup>
Monoethanolamine	3 ppm; 6 mg/m <sup>3</sup>	3 ppm
Citrus extracts (citrus terpenes)	Not available.	Not available.
Benzothiazole-2-thiol	Not available.	Not available.

#### 8.2 EXPOSURE CONTROLS

**Engineering Controls:** Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

**8.3 INDIVIDUAL PROTECTIVE MEASURES****Personal Protective Equipment:**

**Eye/Face Protection:** Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).

**Skin Protection:**

**Hand Protection:** Wear chemical resistant gloves.

**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.

**General Health and Safety Measures:** Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Thin liquid.
<b>Color:</b>	Yellow.
<b>Odor:</b>	Not available.
<b>Odor Threshold:</b>	Not available.
<b>Physical State:</b>	Liquid.
<b>pH:</b>	12.5
<b>Melting Point/Freezing Point:</b>	Not available.
<b>Initial Boiling Point and Boiling Range:</b>	~ 100 °C (~ 212 °F)
<b>Flash Point:</b>	Not available.
<b>Evaporation Rate:</b>	Not available.
<b>Flammability:</b>	Not flammable.
<b>Lower Flammability/Explosive Limit:</b>	Not available.
<b>Upper Flammability/Explosive Limit:</b>	Not available.
<b>Vapor Pressure:</b>	Not available.
<b>Vapor Density:</b>	Not available.
<b>Relative Density/Specific Gravity:</b>	~ 1.0
<b>Solubility:</b>	Not available.
<b>Partition coefficient: n-octanol/water:</b>	Not available.
<b>Auto-ignition Temperature:</b>	Not available.
<b>Decomposition Temperature:</b>	Not available.
<b>Viscosity:</b>	Not available.
<b>Oxidizing Properties:</b>	Not available.

**Explosive Properties:** Not available.

**VOC content, wt. %:** 6 g/L at 10%

### Section 10: STABILITY AND REACTIVITY

#### 10.1 REACTIVITY

No dangerous reaction known under conditions of normal use.

#### 10.2 CHEMICAL STABILITY

Stable under normal storage conditions.

#### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

#### 10.4 CONDITIONS TO AVOID

Heat. Incompatible materials.

#### 10.5 INCOMPATIBLE MATERIALS

Acids. Bases. Strong oxidizing agents. Strong reducing agents.

#### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

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

### Section 11: TOXICOLOGICAL INFORMATION

#### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

**Likely Routes of Exposure:** Skin contact, skin absorption, eye contact, inhalation, and ingestion.

**Symptoms related to physical/chemical/toxicological characteristics:**

**Eye:** 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.

**Skin:** Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause sensitization by skin contact.

**Ingestion:** May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

**Inhalation:** May cause respiratory tract irritation.

**Acute Toxicity:**

Ingredient	IDLH	LC50	LD50
Alcohols, C8-10, ethoxylated propoxylated	Not available.	Not available.	Oral 2368.8 mg/kg, rat
Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramethylbutyl)phenoxy]-	Not available.	Not available.	Not available.
Carboxylic acid amine salt	Not available.	Not available.	Not available.
Triethanolamine	Not available.	Not available.	Oral 7200 mg/kg, rat Dermal > 2000 mg/kg, rabbit
Potassium hydroxide	Not available.	Not available.	Oral 273 mg/kg, rat
Monoethanolamine	30 ppm	Not available.	Oral 1720 mg/kg, rat Dermal 1000 mg/kg, rabbit
Citrus extracts (citrus terpenes)	Not available.	Not available.	Not available.

Benzothiazole-2-thiol	30 ppm	Not available.	Oral 3800 mg/kg, rat Dermal > 7940 mg/kg, rabbit
-----------------------	--------	----------------	---

Calculated overall Chemical Acute Toxicity Values		
LC50 (inhalation)	LD50 (oral)	LD50 (dermal)
> 20 mg/L 4h, rat	> 2000 mg/kg, rat	> 2000 mg/kg, rabbit

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)*
Alcohols, C8-10, ethoxylated propoxylated	Not listed.
Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramethylbutyl)phenoxy]-	Not listed.
Carboxylic acid amine salt	Not listed.
Triethanolamine	I-3
Potassium hydroxide	Not listed.
Monoethanolamine	Not listed.
Citrus extracts (citrus terpenes)	Not listed.
Benzothiazole-2-thiol	Not listed.

\* See Section 15 for more information.

## 11.2 DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT- AND LONG-TERM EXPOSURE

<b>Skin Corrosion/Irritation:</b>	Causes skin irritation.
<b>Serious Eye Damage/Irritation:</b>	Causes serious eye damage.
<b>Respiratory Sensitization:</b>	Based on available data, the classification criteria are not met.
<b>Skin Sensitization:</b>	May cause an allergic skin reaction.
<b>STOT-Single Exposure:</b>	Based on available data, the classification criteria are not met.
<b>Chronic Health Effects:</b>	
<b>Carcinogenicity:</b>	Based on available data, the classification criteria are not met.
<b>Germ Cell Mutagenicity:</b>	Based on available data, the classification criteria are not met.
<b>Reproductive Toxicity:</b>	
<b>Developmental:</b>	Based on available data, the classification criteria are not met.
<b>Teratogenicity:</b>	Based on available data, the classification criteria are not met.
<b>Embryotoxicity:</b>	Based on available data, the classification criteria are not met.
<b>Fertility:</b>	Based on available data, the classification criteria are not met.
<b>STOT-Repeated Exposure:</b>	Based on available data, the classification criteria are not met.
<b>Aspiration Hazard:</b>	Based on available data, the classification criteria are not met.
<b>Toxicologically Synergistic Materials:</b>	Not available.
<b>Other Information:</b>	Not available.

## Section 12: ECOLOGICAL INFORMATION

### 12.1 ECOTOXICITY

<b>Acute/Chronic Toxicity:</b>	May cause long-term adverse effects in the aquatic environment.
--------------------------------	---

**12.2 PERSISTENCE AND DEGRADABILITY**

Biodegradable.

**12.3 BIOACCUMULATIVE POTENTIAL****Bioaccumulation:** Not available.**12.4 MOBILITY IN SOIL**

Not available.

**12.5 OTHER ADVERSE EFFECTS**

Not available.

**Section 13: DISPOSAL CONSIDERATIONS****13.1 WASTE TREATMENT METHODS****Disposal Method:** This material must be disposed of in accordance with all local, state, provincial, and federal regulations.**Other disposal recommendations:** Not available.**Section 14: TRANSPORT INFORMATION****14.1 UN NUMBER****DOT**

Not regulated.

**TDG**

Not regulated.

**NOM-004-SCT2-1994**

Not regulated.

**14.2 UN PROPER SHIPPING NAME****DOT**

Not applicable.

**TDG**

Not applicable.

**NOM-004-SCT2-1994**

Not applicable.

**14.3 TRANSPORT HAZARD CLASS (ES)****DOT**

Not applicable.

**TDG**

Not applicable.

**NOM-004-SCT2-1994**

Not applicable.

**14.4 PACKING GROUP****DOT**

Not applicable.

**TDG**

Not applicable.

**NOM-004-SCT2-1994**

Not applicable.

**14.5 ENVIRONMENTAL HAZARDS**

Not available.

**14.6 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE**

Not available.

**14.7 SPECIAL PRECAUTIONS FOR USER**

Do not handle until all safety precautions have been read and understood.



**Section 15: REGULATORY INFORMATION**
**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATIONS SPECIFIC FOR THE CHEMICAL**

**Canada:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

**US:** SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

**Mexico:** SDS prepared pursuant to NOM-018-STPS-2000.

SARA Title III				
Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Alcohols, C8-10, ethoxylated propoxylated	Not listed.	Not listed.	Not listed.	Not listed.
Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramethylbutyl)phenoxy]-	Not listed.	Not listed.	Not listed.	Not listed.
Carboxylic acid amine salt	Not listed.	Not listed.	Not listed.	Not listed.
Triethanolamine	Not listed.	Not listed.	Not listed.	Not listed.
Potassium hydroxide	Not listed.	Not listed.	1,000	Not listed.
Monoethanolamine	Not listed.	Not listed.	Not listed.	Not listed.
Citrus extracts (citrus terpenes)	Not listed.	Not listed.	Not listed.	Not listed.
Benzothiazole-2-thiol	Not listed.	Not listed.	Not listed.	313

**State Regulations**
**California Proposition 65:**

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**Global Inventories:**

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

Ingredient	Canada DSL/NDSL
Alcohols, C8-10, ethoxylated propoxylated	DSL
Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramethylbutyl)phenoxy]-	DSL
Carboxylic acid amine salt	DSL
Triethanolamine	DSL
Potassium hydroxide	DSL
Monoethanolamine	DSL
Citrus extracts (citrus terpenes)	DSL
Benzothiazole-2-thiol	DSL

**NFPA-National Fire Protection Association:**

<b>Health:</b>	3
<b>Fire:</b>	0
<b>Reactivity:</b>	0

HMIS-Hazardous Materials Identification System:	
Health:	3*
Fire:	0
Physical Hazard:	0

**Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

**SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:**

**CP65 California Proposition 65**

**OSHA (O) Occupational Safety and Health Administration.**

**ACGIH (G) American Conference of Governmental Industrial Hygienists.**

- A1 - Confirmed human carcinogen.
- A2 - Suspected human carcinogen.
- A3 - Animal carcinogen.
- A4 - Not classifiable as a human carcinogen.
- A5 - Not suspected as a human carcinogen.

**IARC (I) International Agency for Research on Cancer.**

- 1 - The agent (mixture) is carcinogenic to humans.
- 2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
- 2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
- 3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
- 4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

**NTP (N) National Toxicology Program.**

- 1 - Known to be carcinogens.
- 2 - Reasonably anticipated to be carcinogens.

**Section 16: OTHER INFORMATION**

**Date of Preparation:** December 2, 2014

**Expiry Date:** December 2, 2017

**Version:** 2.1

**Revision Date:** November 17, 2015

**Disclaimer:** We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

**Prepared by:** Nexreg Compliance Inc.  
Phone: (519) 488-5126  
[www.nexreg.com](http://www.nexreg.com)

**Prepared for:** Magnaflux

**End of Safety Data Sheet**