

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

Date of issue: 10/28/2016 Revision date: 10/28/2016 Version: 1.0

SECTION 1: IDENTIFICATION

1.1. PRODUCT IDENTIFIER

Product name : Daraclean 282GF
Product code : Not available

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

Use of the substance/mixture : Non-Destructive Testing

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Manufacturer Distributor

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

1.4. EMERGENCY TELEPHONE NUMBER

Emergency number : CHEMTREC 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS classification

Skin Irrit. 2 Eye Dam. 1 Skin Sens. 1

2.2. LABEL ELEMENTS

GHS labelling

Hazard pictograms (GHS)



GHS05 GHS07

Signal word (GHS) : Danger

Hazard statements (GHS) : Causes skin irritation

Causes serious eye damage May cause an allergic skin reaction

Precautionary statements (GHS) : Wash hands thoroughly after handling

Wear protective gloves, eye protection, face protection Avoid breathing dust, fume, gas, mist, vapours, spray

Contaminated work clothing must not be allowed out of the workplace.

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

Dispose of contents/container in accordance with local/regional/national/international

regulations

2.3. OTHER HAZARDS

No additional information available

2.4. UNKNOWN ACUTE TOXICITY (GHS)

Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCE

Not applicable

10/28/2016 EN (English) Page 1



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

3.2. MIXTURE

Name	Product identifier	%
Alcohols, C8-10, ethoxylated propoxylated	(CAS No) 68603-25-8	3.00
Triethanolamine	(CAS No) 102-71-6	1.20
Potassium hydroxide	(CAS No) 1310-58-3	0.90
Tolyltriazole, sodium salt	(CAS No) 64665-57-2	0.51
D-Limonene	(CAS No) 5989-27-5	0.50
Ethanolamine	(CAS No) 141-43-5	0.50
Morpholine	(CAS No) 110-91-8	0.40
2-Mercaptobenzothiazole	(CAS No) 149-30-4	0.20

SECTION 4: FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get

medical advice/attention.

First-aid measures after eye contact : 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.

First-aid measures after ingestion : 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

e anything by mouth to an unconscious person. Get medical a

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

Symptoms/injuries after inhalation : May cause respiratory tract irritation.

Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking

of the skin. 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 stomach distress, nausea or vomiting.

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

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

Suitable extinguishing media : Foam. Water fog. Dry chemical powder. Carbon dioxide.

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

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.

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). Use water spray to keep fire-exposed containers cool.

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. Avoid contact with skin and eyes. Spills of this

material are a slipping hazard.

6.2. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

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.

10/28/2016 EN (English) 2/7



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

REFERENCE TO OTHER SECTIONS 6.3.

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING 7.1.

Precautions for safe handling

Avoid contact with skin and eyes. Avoid breathing dust, fume, gas, mist, vapours, spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage conditions

: Keep out of the reach of children. Keep container tightly closed. Store in a cool, well-ventilated place.

7.3. **SPECIFIC END USE(S)**

Not available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **CONTROL PARAMETERS**

Alcohols, C8-10, ethoxylated propoxylated (68603-25-8)			
Not applicable	Not applicable		
Triethanolamine (102-71-6)			
ACGIH	ACGIH TWA (mg/m³)	5 mg/m³	
OSHA	Not applicable		
Potassium hydroxide (1310-58-3)			
ACGIH	ACGIH Ceiling (mg/m³)	2 mg/m³	
NIOSH	NIOSH REL (ceiling) (mg/m³)	2 mg/m³	
Tolyltriazole, sodium salt (64665-57-2)			

Not applicable

D-Limonene (5989-27-5)

Not applicable

Ethanolamine (141-43-5)		
ACGIH	ACGIH TWA (ppm)	3 ppm
ACGIH	ACGIH STEL (ppm)	6 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	6 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	3 ppm
IDLH	US IDLH (ppm)	30 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	8 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	3 ppm
NIOSH	NIOSH REL (STEL) (mg/m³)	15 mg/m³
NIOSH	NIOSH REL (STEL) (ppm)	6 ppm

Morpholine (110-91-8)		
ACGIH	ACGIH TWA (ppm)	20 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	70 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	20 ppm
IDLH	US IDLH (ppm)	1400 ppm (10% LEL)
NIOSH	NIOSH REL (TWA) (mg/m³)	70 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	20 ppm
NIOSH	NIOSH REL (STEL) (mg/m³)	105 mg/m³

10/28/2016 EN (English) 3/7



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

Morpholine (110-91-8)		
NIOSH	NIOSH REL (STEL) (ppm)	30 ppm
2-Mercaptobenzothiazole (149-30-4)		
2-Mercaptobenzothiazole (14	9-30-4)	

8.2. EXPOSURE CONTROLS

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, etc.) below

recommended exposure limits.

Hand protection : Wear chemically resistant protective gloves.

Eye protection : Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles)

and face protection (face shield).

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 : Maintain levels below Community environmental protection thresholds.

Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands

carefully before eating or smoking. Handle according to established industrial hygiene and

safety practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Liquid
Appearance : Thin liquid
Colour : Clear Yellow
Odour : Citrus

Odour threshold : No data available

pH : 12.5

: No data available Melting point Freezing point : No data available Boiling point : ≈ 100 °C (≈ 212 °F) Flash point : No data available : No data available Relative evaporation rate (butylacetate=1) Flammability (solid, gas) : Not flammable Vapour pressure : No data available Relative vapour density at 20 °C : No data available

. ≈ 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 : No data available Viscosity, dynamic : No data available **Explosive limits** Explosive properties : No data available Oxidising properties : No data available

9.2. OTHER INFORMATION

VOC content : 10.24 g/l

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

Relative density

No dangerous reaction known under conditions of normal use.

10/28/2016 EN (English) 4/7



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

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. Oxidizing agent. Strong bases. 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

Acute toxicity : Not classified.

Acute toxicity	: Not classified.
Daraclean 282GF	
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)
Triethanolamine (102-71-6)	
LD50 oral rat	4190 mg/kg
LD50 dermal rabbit	> 20 ml/kg
Potassium hydroxide (1310-58-3)	
LD50 oral rat	284 mg/kg
D-Limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg
LD50 dermal rabbit	> 5 g/kg
Ethanolamine (141-43-5)	
LD50 oral rat	1720 mg/kg
LD50 dermal rabbit	1000 mg/kg
Morpholine (110-91-8)	
LD50 oral rat	1050 mg/kg
LD50 dermal rabbit	310 - 810 mg/kg
LC50 inhalation rat	8000 ppm/8h
2-Mercaptobenzothiazole (149-30-4)	
LD50 oral rat	100 mg/kg
LD50 dermal rabbit	> 7940 mg/kg
Skin corrosion/irritation	: Causes skin irritation based on test results.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Triethanolamine (102-71-6)	
IARC group	3 - Not classifiable
D-Limonene (5989-27-5)	
IARC group	3 - Not classifiable
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity

10/28/2016 EN (English) 5/7



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

M (440.04.0)	
Morpholine (110-91-8)	
IARC group	3 - Not classifiable
2-Mercaptobenzothiazole (149-30-4)	
IARC group	2A - Probably carcinogenic to humans
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity
Reproductive toxicity	: Not classified.
Specific target organ toxicity (single exposure)	: Not classified.
Specific target organ toxicity (repeated exposure)	: Not classified.
Aspiration hazard	: Not classified.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. 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 stomach distress, nausea or vomiting.

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. PERSISTENCE AND DEGRADABILITY

Daraclean 282GF	
Persistence and degradability	Not established.

12.3. BIOACCUMULATIVE POTENTIAL

Daraclean 282GF	
Bioaccumulative potential	Not established.

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.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

Waste 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.

SECTION 14: TRANSPORT INFORMATION

In accordance with DOT/TDG/IATA/IMDG

DOT (bulk) : Not regulated for transport
DOT (non-bulk) : Not regulated for transport
TDG : Not regulated for transport
IATA : Not regulated for transport
IMDG : Not regulated for transport

ADDITIONAL INFORMATION

Other information : No supplementary information available.

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

10/28/2016 EN (English) 6/7



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SECTION 15: REGULATORY INFORMATION

15.1. FEDERAL REGULATIONS

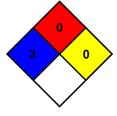
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

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, except for:

LZ-Z 1 RR-10545-3

2-Mercaptobenzothiazole (149-30-4)	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %

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



15.2. US STATE REGULATIONS

Daraclean 282GF	
State or local regulations	This product contains chemicals known to the State of California to cause cancer, birth
	defects or other reproductive harm.

SECTION 16: OTHER INFORMATION

Date of issue : 10/28/2016
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Other information : None.

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10/28/2016 EN (English) 7/7