

**SECTION 1: IDENTIFICATION****1.1. IDENTIFICATION**

Product form : Mixtures  
Product name : Daraclean 235

**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**

<b>Manufacturer</b>	<b>Distributor</b>
Magnaflux 155 Harlem Ave. Glenview, IL 60025 - 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**

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 Irrit. 2  
Eye Dam. 1  
Carc. 2

**2.2. LABEL ELEMENTS****GHS labelling**

Hazard pictograms (GHS) :



GHS05

GHS08

Signal word (GHS) :

Danger

Hazard statements (GHS) :

Causes skin irritation. Causes serious eye damage. Suspected of causing cancer.

Precautionary statements (GHS) :

Wash hands thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation 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 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

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

Not applicable

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

### 3.2. MIXTURES

Name	Product identifier	%
Triethanolamine	(CAS No) 102-71-6	4.88
Nonanoic acid	(CAS No) 112-05-0	4.75
Diethanolamine	(CAS No) 111-42-2	0.11

## 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 clothing before reuse. Call a physician if irritation develops and persists.
- 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 unwell.

### 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.
- 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 : Water fog. Foam. Dry chemical. 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. Oxides of nitrogen.
- Reactivity : No dangerous reaction known under conditions of normal 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).

## 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. Spills of this material are a slipping hazard.

#### 6.1.1. FOR NON-EMERGENCY PERSONNEL

No additional information available

#### 6.1.2. FOR EMERGENCY RESPONDERS

No additional information available

### 6.2. ENVIRONMENTAL PRECAUTIONS

No additional information available

### 6.3. 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.

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

#### 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 : 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.

#### 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.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. CONTROL PARAMETERS

Triethanolamine (102-71-6)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
OSHA	Not applicable	
Nonanoic acid (112-05-0)		
ACGIH	Not applicable	
OSHA	Not applicable	
Diethanolamine (111-42-2)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> (inhalable fraction and vapor)
OSHA	Not applicable	
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	3 ppm

#### 8.2. EXPOSURE CONTROLS

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, 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 : Hazy  
 Colour : Amber  
 Odour : No data available  
 Odour threshold : No data available  
 pH : 7 - 8  
 Melting point : No data available  
 Freezing point : No data available  
 Boiling point : Initial : ~ 100 °C (212 °F)  
 Flash point : No data available

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

Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: 18 mm Hg @ 20 °C (68 °F)
Relative vapour density at 20 °C	: No data available
Relative density	: ~ 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 : 10.16 g/l

## 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

Strong oxidizing agents.

### 10.6. HAZARDOUS DECOMPOSITION PRODUCTS

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

## 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 235	
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
Nonanoic acid (112-05-0)	
LD50 oral rat	> 2 g/kg
Diethanolamine (111-42-2)	
LD50 oral rat	780 mg/kg

Skin corrosion/irritation : Causes skin irritation.  
 pH: 7 - 8

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

Serious eye damage/irritation	: Causes serious eye damage. pH: 7 - 8
Respiratory or skin sensitization	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Suspected of causing cancer.

Triethanolamine (102-71-6)	
IARC group	3 - Not classifiable

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

Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.
STOT-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.
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.
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Triethanolamine (102-71-6)	
LC50 fish 1	10600 - 13000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	> 1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

Nonanoic acid (112-05-0)	
LC50 fish 1	93.4 - 115 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	68 - 121 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

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)

### 12.2. PERSISTENCE AND DEGRADABILITY

Daraclean 235	
Persistence and degradability	Not established.

### 12.3. BIOACCUMULATIVE POTENTIAL

Daraclean 235	
Bioaccumulative potential	Not established.

Triethanolamine (102-71-6)	
BCF fish 1	< 3.9
Partition coefficient n-octanol/water	-2.53

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

### 12.4. MOBILITY IN SOIL

No additional information available

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

**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**

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.

**SECTION 14: TRANSPORT INFORMATION**

In accordance with DOT/TDG/IATA/IMDG

- DOT (bulk) : Not regulated for transport
- DOT (non-bulk) : Not regulated for transport
- Transportation of Dangerous Goods : Not regulated for transport
- IATA : Not regulated for transport
- IMDG : Not regulated for transport

**SECTION 15: REGULATORY INFORMATION**

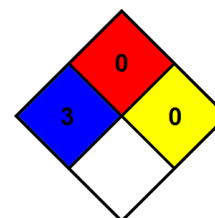
**15.1. FEDERAL REGULATIONS**

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.

Diethanolamine (111-42-2)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1 %

- NFPA health hazard : 3
- NFPA fire hazard : 0
- 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	

Triethanolamine (102-71-6)
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

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

**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

**SECTION 16: OTHER INFORMATION**

Revision date : 12/29/2016  
Other information : None.  
Prepared by : Nexreg Compliance Inc.  
[www.Nexreg.com](http://www.Nexreg.com)



SDS HazCom 2012 - WHMIS 2015 Nexreg Magnaflux

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