



# Safety Data Sheet

Condenser  
coil  
wash  
(inside coils)  
Version 1

Issue Date: 09-Sep-2014

Revision Date: 31-Mar-2015

## 1. IDENTIFICATION

### Product Identifier

Product Name KleenCoil

### Other means of identification

SDS # NRI-004

Product Code KN\_GNC - 1gl, 2.5gl, 5gl, 55gl

### Recommended use of the chemical and restrictions on use

Recommended Use Coil cleaner.

### Details of the supplier of the safety data sheet

#### Distributor

National Refrigeration Products  
985 Wheeler Way  
Langhorne, PA 19047 USA

### Emergency Telephone Number

Company Phone Number 1-800-352-6951

Emergency Telephone (24 hr) Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

## 2. HAZARDS IDENTIFICATION

Appearance Clear pale to green liquid

Physical State Liquid

Odor Solvent

### Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

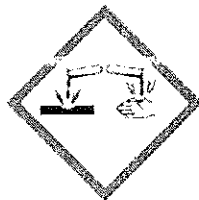
### Signal Word

Danger

### Hazard Statements

Causes skin irritation

Causes serious eye damage



### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

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/physician  
IF ON SKIN: Wash with plenty of soap and water  
Take off contaminated clothing and wash it before reuse  
Get immediate medical advice/attention

**Other Hazards**

Harmful to aquatic life with long lasting effects

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
Ethylene Glycol Monobutyl Ether	111-76-2	<5
Monoethanolamine	141-43-5	<3
Dodecyl benzene sulfonic acid	27176-87-0	<2
Tetrasodium EDTA	64-02-8	<1

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

**4. FIRST-AID MEASURES****First Aid Measures**

<b>Eye Contact</b>	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/physician. Do NOT drive yourself as vision may be impaired.
<b>Skin Contact</b>	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. Seek immediate medical attention/advice.
<b>Inhalation</b>	Remove to fresh air. Seek immediate medical attention/advice.
<b>Ingestion</b>	Do not induce vomiting. Give large quantities of water. Get medical attention.

**Most important symptoms and effects**

<b>Symptoms</b>	Causes severe eye damage. Causes skin irritation. Can cause respiratory tract irritation. Ingestion may cause mild irritation of the throat, digestive tract, and stomach.
-----------------	--

**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	CHRONIC EFFECTS: Prolonged exposure to mists or liquid could result in tissue irritation.
---------------------------	---

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Water spray (fog). Fine spray. Carbon dioxide (CO2). Dry chemical. Foam.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Floor will become slippery if material is released.

**Hazardous Combustion Products** Aldehydes. Carbon dioxide (CO2). Other oxides.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

<b>Personal Precautions</b>	Use personal protective equipment as required.
<b>Environmental Precautions</b>	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

### Methods and material for containment and cleaning up

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Clean-Up</b>	Contain and collect with an inert absorbent and place into an appropriate container for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

<b>Advice on Safe Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Keep away from heat, open flames or other sources of ignition. Keep container closed when not in use.
--------------------------------	---

### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep container tightly closed and store in a cool, dry and well-ventilated place. Store away from incompatible materials. Keep from freezing.
<b>Incompatible Materials</b>	Acids. Organic halogen compounds. Chlorine compounds. Oxidizing materials.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylene Glycol Monobutyl Ether 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>
Monoethanolamine 141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m <sup>3</sup> (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m <sup>3</sup> (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m <sup>3</sup>	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m <sup>3</sup> STEL: 6 ppm STEL: 15 mg/m <sup>3</sup>

### Appropriate engineering controls

<b>Engineering Controls</b>	Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.
-----------------------------	---

### Individual protection measures, such as personal protective equipment

<b>Eye/Face Protection</b>	Chemical goggles or full face shield.
<b>Skin and Body Protection</b>	Impervious rubber gloves. Suitable protective clothing.
<b>Respiratory Protection</b>	Ensure adequate ventilation, especially in confined areas.
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical State	Liquid	Odor	Solvent
Appearance	Clear pale to green liquid	Odor Threshold	Not determined
Color	Clear pale to green		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	12.0 - 13.0	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-Not Applicable	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	1.01 - 1.03	
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

#### **Hazardous Polymerization**

Hazardous polymerization does not occur.

### Conditions to Avoid

Keep separated from incompatible substances. Keep out of reach of children.

### Incompatible Materials

Acids. Organic halogen compounds. Chlorine compounds. Oxidizing materials.

### Hazardous Decomposition Products

Aldehydes. Carbon dioxide (CO<sub>2</sub>). Other oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### **Product Information**

#### **Eye Contact**

Causes serious eye damage.

<b>Skin Contact</b>	Causes skin irritation.
<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Ingestion</b>	Do not ingest.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethylene Glycol Monobutyl Ether 111-76-2	= 470 mg/kg ( Rat )	= 2270 mg/kg ( Rat ) = 220 mg/kg ( Rabbit )	= 2.21 mg/L ( Rat ) 4 h = 450 ppm ( Rat ) 4 h
Monoethanolamine 141-43-5	= 1720 mg/kg ( Rat )	= 1 mL/kg ( Rabbit ) = 1025 mg/kg ( Rabbit )	-
Dodecyl benzene sulfonic acid 27176-87-0	= 500 mg/kg ( Rat )	-	-
Tetrasodium EDTA 64-02-8	= 10 g/kg ( Rat )	-	-
Alcohols, C9-11 ethoxylated 68439-46-3	= 1378 mg/kg ( Rat )	> 2 g/kg ( Rabbit )	-

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethylene Glycol Monobutyl Ether 111-76-2	A3	Group 3		

**Legend**

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Harmful to aquatic life with long lasting effects.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethylene Glycol Monobutyl Ether 111-76-2		1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50		1698 - 1940: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50

Monoethanolamine 141-43-5	15: 72 h Desmodesmus subspicatus mg/L EC50	227: 96 h Pimephales promelas mg/L LC50 flow- through 3684: 96 h Brachydanio rerio mg/L LC50 static 300 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 114 - 196: 96 h Oncorhynchus mykiss mg/L LC50 static 200: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	65: 48 h Daphnia magna mg/L EC50
Dodecyl benzene sulfonic acid 27176-87-0	29: 96 h Pseudokirchneriella subcapitata mg/L EC50	10.8: 96 h Oncorhynchus mykiss mg/L LC50 static 3.5 - 10: 96 h Brachydanio rerio mg/L LC50 static	5.88: 48 h Daphnia magna mg/L EC50
Tetrasodium EDTA 64-02-8	1.01: 72 h Desmodesmus subspicatus mg/L EC50	41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static	610: 24 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Ethylene Glycol Monobutyl Ether 111-76-2	0.81
Monoethanolamine 141-43-5	-1.91

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION****Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

Not regulated

**IATA**

Not regulated

**IMDG****Marine Pollutant**

This material may meet the definition of a marine pollutant

**15. REGULATORY INFORMATION****International Inventories****TSCA**

Listed

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**US Federal Regulations****CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Dodecyl benzene sulfonic acid 27176-87-0	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ethylene Glycol Monobutyl Ether - 111-76-2	111-76-2	<5	1.0

**CWA (Clean Water Act)**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Dodecyl benzene sulfonic acid 27176-87-0 ( <2 )	1000 lb			X

**US State Regulations****California Proposition 65**

Chemical Name	Type
Monoethanolamine 141-43-5	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethylene Glycol Monobutyl Ether 111-76-2	X	X	X
Monoethanolamine 141-43-5	X	X	X
Dodecyl benzene sulfonic acid 27176-87-0	X	X	X

**16. OTHER INFORMATION****NFPA****Health Hazards****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

**HMIS****Health Hazards****Flammability****Physical Hazards****Personal Protection**

2

1

1

Not determined

**Issue Date:**

09-Sep-2014

**Revision Date:**

31-Mar-2015

**Revision Note:**

New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet