



## Material Safety Data Sheet

Print date: 02/10/2004

Version: 1

Revision date: 02/10/2004

### 1. COMPANY AND PRODUCT IDENTIFICATION

**Product code:** 014095-01 03  
**Product name:** **QUAKERCOOL™ 2780**

**Supplier:**  
Quaker Chemical Corporation  
Quaker Park One  
901 Hector Street  
Conshohocken, PA 19428  
610-832-4000  
E-mail: she@quakerchem.com

**Emergency telephone number:**  
\* 24 HOUR TRANSPORTATION:  
\*\*CHEMTREC: 1-800-424-9300  
703-527-3887 (Call collect outside of US)  
\* 24 HOUR EMERGENCY HEALTH & SAFETY:  
\*\*QUAKER CHEMICAL CORPORATION: (800) 523-7010  
(Within US only)  
Outside of US call (703) 527-3887

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### HAZARDOUS COMPONENTS

| Components  | Weight % | CAS No.   | OSHA TWA (final): | ACGIH Exposure Limits: |
|---|----------|-----------|-------------------|------------------------|
| 2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol | 1 - 5%   | 4719-04-4 | None              | None                   |
| Oxirane, methyl-, polymer with oxirane                    | 15 - 20% | 9003-11-6 | None              | None                   |
| Triethanolamine   | 5 - 10%  | 102-71-6  | None              | 5 mg/m³                |

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

Irritating to eyes.  
May cause skin irritation and/or dermatitis.  
May cause irritation of respiratory tract.  
May be harmful if swallowed.

**Principle routes of exposure:** Eyes, skin and inhalation.

**Signal word:** WARNING

**Eye contact:** Irritating to eyes.

**Skin contact:** Prolonged and/or repeated contact may cause irritation and redness.

**Inhalation:** Avoid breathing vapors or mists. May cause irritation of respiratory tract.  
**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.  
**Physico-chemical properties:** No hazards resulting from material as supplied.

#### 4. FIRST AID MEASURES

**General advice:** If symptoms persist, call a physician.  
**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician  
**Skin contact:** Wash off immediately with soap and plenty of water. Consult a physician if necessary.  
**Ingestion:** If swallowed, seek medical advice immediately and show this container or label. Never give anything by mouth to an unconscious person.  
**Inhalation:** Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.  
**Notes to physician:** Treat symptomatically.  
**Medical conditions aggravated - by exposure** None known.

#### 5. FIRE-FIGHTING MEASURES

**Flash point (°C): NA**                      **Flash point (°F): NA**                      **Flash Point Method:** Not applicable  
**Flammable limits in air - lower (%):** Not determined                      **Flammable limits in air - upper (%):** Not determined  
**Suitable extinguishing media:** Use dry chemical, CO<sub>2</sub>, water spray or 'alcohol' foam.  
**Unusual hazards:** None known  
**Special protective equipment for fire-fighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.  
**Specific methods:** Water mist may be used to cool closed containers.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Ensure adequate ventilation.  
**Environmental precautions:** Do not flush into surface water or sanitary sewer system.  
**Methods for cleaning up:** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

#### 7. HANDLING AND STORAGE

**Handling**

**Technical measures/precautions:**

Provide sufficient air exchange and/or exhaust in work rooms.

**Safe handling advice:**

Avoid contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Wear personal protective equipment. Wash thoroughly after handling.

**Storage****Technical measures/Storage conditions:**

IF FROZEN, THAW AND MIX THOROUGHLY BEFORE USE.. Store at room temperature in the original container.

**Incompatible products:**

No special restrictions on storage with other products

**Safe storage temperature**

40-100 ° F

**Shelf life:**

12 months

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Components      | ACGIH Exposure Limits: | OSHA TWA (final): | NIOSH - Pocket Guide - TWAs: | Vendor Exposure Limits: |
|-----------------|------------------------|-------------------|------------------------------|-------------------------|
| Triethanolamine | 5 mg/m <sup>3</sup>    |                   |                              |                         |

**Engineering measures:**

Ensure adequate ventilation.

**Personal Protective Equipment****General:**

Eye Wash and Safety Shower

**Respiratory protection:**

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

**Hand protection:**

Neoprene gloves

**Skin and body protection:**

Usual safety precautions while handling the product will provide adequate protection against this potential effect.

**Eye protection:**

Safety glasses with side-shields

**Hygiene measures:**

Avoid contact with skin, eyes and clothing.



## 9. PHYSICAL AND CHEMICAL PROPERTIES:

**Physical State:**

liquid.

**Color:**

Clear, Yellow, Amber

**Odour:**

Bland

**Boiling point/range (°C):**

>100

**Boiling point/range (°F):**

>212

**Vapor density:**

Not determined

**Vapour pressure:**

Not determined

**Solubility:**

Completely soluble

**Evaporation rate:**

Not determined

**VOC Content Product:**

0.85 lb/gal (EPA Method 24)

|                                 |                   |
|---------------------------------|-------------------|
| pH:                             | 8.85              |
| Flash point (°C):               | NA                |
| Flash point (°F):               | NA                |
| Decomposition temperature:      | Not determined    |
| Autolgnition temperature:       | Not determined    |
| Density @ 15.5 ° C (g/cc) :     | 1.048             |
| Bulk density @ 60 ° F (lb/gal): | 8.75              |
| Partition coefficient           | Not determined    |
| (n-octanol/water, log Pow):     |                   |
| <b>Explosive properties:</b>    |                   |
| - upper explosion limit:        | No data available |
| - lower explosion limit:        | No data available |

## 10. STABILITY AND REACTIVITY

### Conditions to avoid:

None known

### Materials to avoid:

Strong acids and oxidising agents

### Hazardous decomposition products

None under normal use

### Stability:

Stable under recommended storage conditions.

### Polymerization:

Not applicable

## 11. TOXICOLOGICAL INFORMATION

WARNING! Do not add nitrites to this metalworking fluid under penalty of federal law. Addition of nitrites leads to formation of a substance known to cause cancer. This product is designed to be used without nitrites.

No toxicological information is available on the product. Data obtained on components are summarized below.

| Components  | NTP:   | IARC:  | OSHA -<br>Select Carcinogens   | NIOSH -<br>Selected LD50s and<br>LC50s                                       |
|---|--|--|--|--|
| 2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol | This product does not contain any material shown to be a carcinogen by the National Toxicology Program (NTP).  | This product does not contain any material shown to be a carcinogen by the International Agency for Research on Cancer (IARC). | This product does not contain any material shown to be a carcinogen by OSHA. | 763mg/kgOral LD50Rat   |
| Oxirane, methyl-, polymer with oxirane                    | This product does not contain any material shown to be a carcinogen by the National Toxicology Program (NTP).  | This product does not contain any material shown to be a carcinogen by the International Agency for Research on Cancer (IARC). | This product does not contain any material shown to be a carcinogen by OSHA. | 3g/kgOral LD50Mouse<br>5700mg/kgOral LD50Rat                                 |
| Triethanolamine   | male rat-equivocal evidence; female rat-no evidence; male mice-inadequate; female mice-inadequate; (TR-518: male mice-equivocal evidence); (TR-518: female mice-some evidence) | This product does not contain any material shown to be a carcinogen by the International Agency for Research on Cancer (IARC). | This product does not contain any material shown to be a carcinogen by OSHA. | 4920µL/kgOral LD50Rat<br>5846mg/kgOral LD50Mouse<br>20mL/kgDermal LD50Rabbit |

## 12. ECOLOGICAL INFORMATION

**Persistence and degradability:** No information available

**Mobility:** No data available

**Bioaccumulation:** No data available

**Ecotoxicity effects:** No data available

**Aquatic toxicity:** Not Determined

## 13. DISPOSAL CONSIDERATIONS

**Waste from residues/unused products:** Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

**Contaminated packaging:** Do not re-use empty containers

**Methods for cleaning up:** Take up mechanically and collect in suitable container for disposal.

## 14. TRANSPORT INFORMATION

### U. S. DEPARTMENT OF TRANSPORTATION:

**Proper shipping name:** Not Regulated

**TDG (CANADA):**

Proper shipping name:

Not Regulated

**IMDG/IMO:**

Proper shipping name:

Not Regulated

**IATA/ICAO:**

Proper shipping name:

Not Regulated

**15. REGULATORY INFORMATION****CLASSIFICATION AND LABELING****OSHA Hazard Communication Standard:**

This product is considered to be hazardous.

**Canada - WHMIS Classification Information:**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**Product Classification:**

Class D2B - Poisonous and Infectious Material: Other toxic effects - includes irritants, skin sensitizers and/ or chronic health effects

**Product Classification Graphic(s):****Component Classification Data:***Triethanolamine - 102-71-6***WHMIS hazard class:** D2B**U.S. REGULATIONS:****SARA (311, 312) hazard class:**

This product possesses the following SARA Hazard Categories:

**Immediate Health (Acute):** Yes**Delayed Health (Chronic):** No**Flammability:** No**Pressure:** No**Reactivity:** No**RCRA Status**

Not Regulated

**STATE REGULATIONS (RTK):***Triethanolamine - 102-71-6***MARTK:**

Present

**PARTK:**

[present]

**INVENTORY STATUS:**

**United States TSCA - Sect. 8(b) Inventory:**

This product complies with TSCA

**Canada DSL Inventory List -**

DSL Compliance has not been determined

**Canada NDSL Inventory List -**

NDSL compliance has not been determined

**Canadian Inventory Status:**

The components of this product are listed on the DSL, the NDSL or are not required to be listed.

**EU EINECS/ELINCS/NLP List -**

Compliance has not been determined

**16. OTHER INFORMATION**

**Sources of key data used to compile the datasheet:**

Material safety data sheets of the ingredients.

**Reason for revision:**

New Format

**Prepared By:**

Quaker Chemical Corporation -Safety, Health and Environmental Affairs Group - US

**HMIS classification:**

**NFPA rating:**

**Health:**

2

**Health:**

2

**Flammability:**

0

**Flammability:**

0

**Reactivity:**

0

**Reactivity:**

0

**Personal Protection:**

B

**Special:**

NA

\* Indicates possible chronic health effect

Personal protection recommendations should be reviewed by purchasers. Workplace conditions are important factors in specifying adequate protection.

**Disclaimer:**

This product's safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is believed to be accurate. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. Quaker Chemical Corporation ("Quaker") assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of Quaker.

**End of Safety Data Sheet**