



# Material Safety Data Sheet

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## 1. COMPANY AND PRODUCT IDENTIFICATION

**Product name:** **QUAKER FORMULA® 97**  
**Product code:** 013826-02 02

**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	CAS No.	Weight %	OSHA Ceiling Limits	OSHA TWA (final):	ACGIH Ceiling Limits	ACGIH Exposure Limits:	Vendor Exposure Limits:
C12-C14 tert alkyl amines, ethoxylated	73138-27-9	1 - 5%		None		None	
Potassium hydroxide	1310-58-3	1 - 5%	2mg/m <sup>3</sup>	None	2mg/m <sup>3</sup>	None	

## 3. HAZARDS IDENTIFICATION

### Emergency Overview

Irritating to eyes.  
Irritating to skin.  
May cause irritation of respiratory tract.  
May be harmful if swallowed.

**Signal word:** CAUTION

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

**Eye contact:** Irritating to eyes.

**Skin contact:** Irritating to skin.

**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 thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin contact:** Rinse immediately with plenty of water for at least 15 minutes

**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 condition aggravated by exposure:** None known.

#### 5. FIRE-FIGHTING MEASURES

**Flash Point (°C):** Not applicable      **Flash point (°F):** Not applicable      **Flash Point Method:** Not applicable

**Flammable limits in air - upper (%):** Not determined      **Flammable limits in air - lower (%):** Not determined

**Suitable extinguishing media:** Use dry chemical, CO2, 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:** In case of insufficient ventilation, wear suitable respiratory equipment.

##### Storage

**Technical measures/storage conditions:** Store at room temperature in the original container

**Incompatible products:** strong oxidizing agents

**Safe storage temperature:** 40-100 ° F

**Shelf life:** 6 months

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components	ACGIH Ceiling Limits	ACGIH Exposure Limits:	OSHA Ceiling Limits	OSHA TWA (final):	NIOSH - Pocket Guide - TWAs:	Vendor Exposure Limits:
C12-C14 tert alkyl amines, ethoxylated		None		None	None	None
Potassium hydroxide	2mg/m <sup>3</sup>	None	2mg/m <sup>3</sup>	None	2mg/m <sup>3</sup> Ceiling	None

**Engineering measures:** Ensure adequate ventilation.

### Personal Protective Equipment

**General:** Eye Wash and Safety Shower

**Respiratory protection:** If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, a NIOSH/MSHA certified respirator with organic vapor/P100 filter should be worn.

**Hand protection:** Neoprene gloves

**Skin and body protection:** Long sleeved clothing

**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

**Odour:** Soapy

**Boiling point/range (°C):** >100

**Boiling point/range (°F):** >212

**Vapour pressure:** Not determined

**Vapour density:** Not determined

**VOC Content Product (lb/gal)** 0.067 (EPA Method 24)

**Solubility:** Completely soluble

**Evaporation rate:** Not determined

**pH:** 9.50-10.50@100%

**Decomposition temperature:** Not determined

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

Auto-ignition temperature:	Not determined
Density @ 15.5 ° C (g/cc) :	1.056
Bulk density @ 60 ° F (lb/gal):	8.81
Partition coefficient (n-octanol/water, log Pow):	Not determined
<b>Explosive properties:</b>	
- upper limit:	No data available
- lower limit:	No data available

## 10. STABILITY AND REACTIVITY

### Stability:

Stable under recommended storage conditions.

### Conditions to avoid:

None known

### Materials to avoid:

Strong acids and oxidising agents

### Hazardous decomposition products:

None under normal use

### Polymerization:

Not applicable

## 11. TOXICOLOGICAL INFORMATION

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

Components	NTP:	IARC:	OSHA - Select Carcinogens	NIOSH - Selected LD50s and LC50s
C12-C14 tert alkyl amines, ethoxylated	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.	2.7g/kg oral LD50 2.4g/kg dermal LD50
Potassium hydroxide	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.	214mg/kg Oral LD50 Rat

## 12. ECOLOGICAL INFORMATION

<b>Persistence and degradability:</b>	No information available
<b>Mobility:</b>	No data available
<b>Bioaccumulation:</b>	No data available
<b>Ecotoxicity effects:</b>	No data available
<b>Aquatic toxicity:</b>	Not Determined
<b>Potassium hydroxide</b>	
<b>Ecotoxicity - Fish Species Data</b>	LC50 (Gambusia affinis - 24h) = 80.0 mg/L

## 13. DISPOSAL CONSIDERATIONS

<b>Waste from residues/unused products:</b>	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.
<b>Contaminated packaging:</b>	Do not re-use empty containers
<b>Methods for cleaning up:</b>	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

<b>OSHA Hazard Communication Standard:</b>	This product is considered to be hazardous under the OSHA Hazard Communication Standard.
<b>Canada - WHMIS Classification Information:</b>	This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
<b>Product Classification:</b>	Class D2B - Poisonous and Infectious Material: Other toxic effects - includes irritants, skin sensitizers and/ or chronic health effects
<b>Product Classification Graphic(s):</b>	



**Component Classification  
Data:**

**Potassium hydroxide - 1310-58-3**

**WHMIS hazard class:** Listed  
D1B, E; E (including 0.11%, 2.5%, 2.8%, 0.01 N, 0.1 N, 10%, 1 N, 25%, 28%, 33.3%,  
40%, 45%, 50%)

**Canadian National Pollution  
Inventory Data:**

**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

**Potassium hydroxide - 1310-58-3**

**Clean Water Act - Hazardous Substances**

Listed

**STATE REGULATIONS (RTK):**

**California Proposition 65 Status:**

No components are listed

**Potassium hydroxide - 1310-58-3**

**MARTK:** Listed  
**NJRTK:** Listed  
**PARTK:** Listed

**INVENTORY STATUS:**

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

This product complies with TSCA

**Canada DSL Inventory List -**

This product complies with DSL

**EC EINECS/ELINCS/NLP list:**

Compliance has not been determined

## 16. OTHER INFORMATION

**Sources of key data used to compile the data sheet:** Material safety data sheets of the ingredients.

**Prepared by:** Quaker Chemical Corporation -Safety, Health and Environmental Affairs Group - US

**Reason for revision:** This data sheet contains changes from the previous version in section(s) 9 VOC data added

**HMS classification:**

**Health:**

2

**Flammability:**

0

**Reactivity:**

0

**Personal Protection:**

B

**NFPA rating:**

**Health:**

2

**Flammability:**

0

**Reactivity:**

0

**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**