



Material Safety Data Sheet

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1. COMPANY AND PRODUCT IDENTIFICATION

Product code: 003211-11
Product name: **QUAKER FORMULA® 625-XL**

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:
Silicic acid, sodium salt	1344-09-8	5 - 10%		None		None	
Sodium hydroxide	1310-73-2	1 - 5%	2mg/m ³	2mg/m ³	2mg/m ³	None	
Sodium tetraborate	1330-43-4	1 - 5%		None		2 mg/m ³ 6mg/m ³ STE L	
Sodium nitrite	7632-00-0	1 - 5%		None		None	
Poly(oxy-1,2-ethanediyl), a-(2-chloroethyl)-w-(decyloxy)-	61702-77-0	1 - 5%		None		None	

3. HAZARDS IDENTIFICATION

Emergency Overview

The product causes burns of eyes, skin and mucous membranes.
Irritating to respiratory system.
May be harmful if swallowed.

Signal word: DANGER
Principle routes of exposure: Eyes, skin and inhalation.
Eye contact: Causes eye burns. Risk of serious damage to eyes.
Skin contact: Causes skin burns.

Inhalation: Avoid breathing vapors or mists. Irritating to respiratory system.
Ingestion: May be harmful if swallowed. Sodium nitrite is a poison by ingestion.
Physico-chemical properties: No hazards resulting from material as supplied.

4. FIRST AID MEASURES

General advice: Take off all contaminated clothing immediately. Rinse immediately with plenty of water and seek medical advice.
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. Remove and wash contaminated clothing before re-use. Consult a physician if necessary.
Ingestion: If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. 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: Dermatitis.

5. FIRE-FIGHTING MEASURES

Flash point (°C): NA boils **Flash point (°F):** NA boils **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. Use personal protective equipment. Avoid contact with the skin and the eyes Do not breathe vapour/dust.

Environmental precautions: Do not flush into surface water or sanitary sewer system.

Methods for cleaning up: Neutralise with acid. Soak up with oil absorbent material. After cleaning, flush away traces with water.

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. Do not breathe vapors or spray mist. In case of insufficient ventilation, wear suitable respiratory equipment. Wear personal protective equipment. Keep container tightly closed. Wash thoroughly after handling.

Storage

Technical measures/storage conditions:

Store at room temperature in the original container

Incompatible products:

Do not store near acids.

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:
Silicic acid, sodium salt		None		None	None	None
Sodium hydroxide	2mg/m ³	None	2mg/m ³	2mg/m ³	2mg/m ³ Ceiling	None
Sodium tetraborate		2 mg/m ³ 6mg/m ³ STEL		None	1mg/m ³ TWA	None
Sodium nitrite		None		None	None	None
Poly(oxy-1,2-ethanediyl), a-(2-chloroethyl)-w-(decyloxy)-		None		None	None	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/HEPA filters should be worn.

Hand protection:

Rubber gloves, Impervious gloves

Skin and body protection:

Chemical resistant apron, Long sleeved clothing

Eye protection:

Goggles.

Hygiene measures:

Avoid contact with skin, eyes and clothing.



9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state:

Liquid

Color:	Clear Colourless to Light yellow
Odour:	Soapy
Boiling point/boiling range (°C):	>100
Boiling point/range (°F):	>212
Vapour pressure:	Not determined
Vapour density:	Not determined
VOC Content Product:	0 lb/gal (EPA calculation)
Solubility:	Completely soluble
Evaporation rate:	Not determined
pH:	12.80-13.70 @ 100%
Flash point (°C):	NA boils
Flash point (°F):	NA boils
Decomposition temperature:	Not determined
Auto-ignition temperature:	Not determined
Density @ 15.5 ° C (g/cc) :	1.131
Bulk density @ 60 ° F (lb/gal):	9.44
Partition coefficient	Not determined
(n-octanol/water, log Pow):	
Explosive properties:	
- 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

This product contains sodium nitrite. Mixing with or contact with primary amine containing products is prohibited by the USEPA as the combination may form nitrosoamines
 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
Silicic acid, sodium salt	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.	1153mg/kgOral LD50Rat
Sodium 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.	1350mg/kgDermal LD50Rabbit
Sodium tetraborate	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.	2403mg/kgOral LD50Rat 2000mg/kgDermal LD50Rabbit
Sodium nitrite	male rat-no evidence; female rat-no evidence; male mice-no evidence; female mice-equivocal 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.	5500µg/m ³ Inhalation LC50Rat 88mg/kgOral LD50Rat
Poly(oxy-1,2-ethanediyl), a-(2-chloroethyl)-w-(decyloxy)-	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.	

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

Sodium nitrite

Ecotoxicity - Fish Species Data = 0.19 mg/L LC50 rainbow trout (juvenile) 96 h flow-through

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:	Neutralise with acid.. Soak up with oil absorbent material.. After cleaning, flush away traces with water..

14. TRANSPORT INFORMATION

U. S. DEPARTMENT OF TRANSPORTATION:

UN/NA ID Number:	UN1719
Proper shipping name:	Caustic Alkali Liquid, N.O.S. (Contains sodium hydroxide and sodium silicate)
Hazard Class	8
Subsidiary risk:	
Packing group:	II
RQ:	Sodium hydroxide, RQ kg= 17971.47
Emergency Response Guide Number:	154
DOT Label(s):	

TDG (CANADA):

UN nr:	UN1719
Proper shipping name:	Caustic Alkali Liquid, N.O.S. (Contains sodium hydroxide and sodium silicate)
TDG Hazard Classification:	8
Subsidiary class:	
Packing group:	II

IMDG/IMO:

UN nr:	UN1719
Proper shipping name:	Caustic Alkali Liquid, N.O.S. (Contains sodium hydroxide and sodium silicate)
Class:	8
Subsidiary class:	
Packing group:	II
EMS:	F-A, S-B
Limited quantity:	1 L

IATA/ICAO:

UN nr:	UN1719
Proper shipping name:	Caustic Alkali Liquid, N.O.S. (Contains sodium hydroxide and sodium silicate)
Hazard Class:	8
Subsidiary class:	
Packing group:	II
Maximum quantity for cargo only:	30 L
Maximum quantity for passenger:	1 L
Limited quantity:	0.5 L

CLASSIFICATION AND LABELING

OSHA Hazard Communication Standard: This product is considered to be hazardous under the OSHA Hazard Communication Standard.

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 E - Corrosive Material
Product Classification Graphic(s):



Component Classification Data:

Silicic acid, sodium salt - 1344-09-8

WHMIS hazard class: D2B (SiO₂: Na₂O ratio more than 2.4:1); E (SiO₂: Na₂O ratio less than 2.4:1)

Sodium hydroxide - 1310-73-2

WHMIS hazard class: 1 % (English Item 1442, French Item 998)
E (including 0.08%, 2%, 2.5%, 5%, 0.01 N, 0.04 N, 0.1 N, 10%, 16%, 1 N, 20%, 40%, 50%, 8.7%)

Sodium tetraborate - 1330-43-4

WHMIS hazard class: 1 % (English Item 1428, French Item 315)

Sodium nitrite - 7632-00-0

WHMIS hazard class: 1 % (English Item 1453, French Item 1218)
C, D1A, D2B

Canadian National Pollution Inventory Data:

Sodium nitrite - 7632-00-0

Canada - NPRI Part 1, Group 1 Substance

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

Sodium nitrite - 7632-00-0

CERCLA/SARA 313 Emission reporting Listed

RCRA Status To be disposed of as hazardous waste characteristic:
corrosive D002

STATE REGULATIONS (RTK):

California Proposition 65 Status: No components are listed

Sodium hydroxide - 1310-73-2

MARTK: Present
NJRTK: sn 1706
PARTK: Environmental hazard

Sodium tetraborate - 1330-43-4

MARTK: Present
PARTK: Present

Sodium nitrite - 7632-00-0

MARTK: Present
NJRTK: sn 2258
PARTK: Environmental hazard

INVENTORY STATUS:

United States TSCA - Sect. 8(b) Inventory: This product complies with TSCA

Canada DSL Inventory List - This product complies with DSL

EC No. 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.

Reason for revision: This data sheet contains changes from the previous version in section(s) 4, 6 and 14

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

HMIS classification:

NFPA rating:

Health:
3

Health:
3

Flammability:
0

Flammability:
0

Reactivity:
1

Reactivity:
1

Personal Protection:
H

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