GENERAL CHEMICAL CORP.

1. Product and Company Identification

Product Identification

CARPET DEGREASER 5673

Company Name

General Chemical Corporation

Company Address

12336 Emerson Dr. Brighton MI 48116 USA

Contact Phone Number

(248) 587-5600

Emergency Phone (Day or Night)

(800) 424-9300

Number (Call Collect from Outside U.S.A)

+1 703-527-3887

2. Hazard Identification

GHS Hazard Categories

- Skin corrosion/irritation Cat 1
- Serious eye damage/eye irritation Cat 1

2.2 GHS Label Elements

GHS Signal Word

Danger

GHS Pictogram

- Corrosion

GHS Hazard Statements

- H314: Causes severe skin burns and eye damage

GHS Precautionary Statements

- P102: Keep out of reach of children
- P262: Do not get in eyes, on skin, or on clothing

- P273: Avoid release to the environment
- P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
- P501: Dispose of contents/container in accordance with local/regional/national regulations

3. Composition / Information on Ingredients

List

Chemical Name(s)	CAS Number	% Weight
2-Butoxyethanol	111-76-2	< 10
Sodium hydroxide	1310-73-2	< 5
Sodium < 5 cumenesulfonate	28348-53-0	< 5

4. First Aid Measures

Inhalation

If adverse effects such as dizziness, nausea, or irritation are noted, move person to fresh air. If not breathing, give artificial respiration. Get medical attention!

Skin Contact

Immediately wash skin with large amounts of soap and water. Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing.

Eye Contact

THE OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY, THEN SEEK MEDICAL ATTENTION! Immediately flush eyes with large amounts of water for at least 15 minutes, holding lids apart to ensure flushing of the entire surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. SEEK MEDICAL ATTENTION IMMEDIATELY!

Ingestion

DO NOT INDUCE VOMITING! Contact a physician immediately!

5. Firefighting Measures

5.1 Extinguishing Media

Water, dry chemical, carbon dioxide, or foam.

5.2 Unusual Fire & Explosion Hazard

Low fire hazard when exposed to heat and flame. Product is not flammable or combustible.

5.3 Advice for Firefighters

Firefighters should wear a self-contained breathing apparatus with a full facepiece operated in pressure demand or other positive pressure mode, and protective clothing.

Flash Point: > 200 °F
Method Used: Tagliabue Closed Cup
Flammable Limits in Air % by Volume: LEL: N/E

UEL: N/E

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

If material is spilled, absorb with sand, earth, or similar inert material. Place in closed, labeled containers for proper disposal.

6.2 Environmental Precautions

CERCLA (Superfund) Reportable Quantity (in lbs None in attainable quantities.

7. Handling and Storage

7.1 Precautions for Safe Handling

Avoid contact with skin and eyes; wash thoroughly after handling. Avoid breathing vapor; use with adequate ventilation.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

KEEP FROM FREEZING! Store in a dry location at room temperature. Keep container closed and maintain all original markings and labels.

7.3 Specific End Use Considerations

If this solution is mixed with water, heat will be given off. When diluting, always add this solution to water SLOWLY with constant mixing, in order to avoid splattering.

8. Exposure Control/Personal Protection

Eye Protection

Safety glasses with side shields. Do NOT wear contact lenses. Chemical goggles and/or faceshield should be worn where splashing is possible.

Skin and Body Protection

Eye wash and safety shower should be readily available.

Respiratory Protection

If this solution is mixed with water, heat will be given off. When diluting, always add this solution to water SLOWLY with constant mixing, in order to avoid splattering.

Hand Protection

Wear chemical resistant gloves.

Hygiene Measures

Protective equipment and clothing should be selected, used and maintained according to applicable standards and regulations. For further information, contact the clothing or equipment manufacturer. Do not eat, drink, or smoke while using this product. Wash hands prior to eating, drinking, smoking, or using restrooms. Cleanse skin thoroughly after contact, before breaks and meals, and at the end of the work shift.

Local Exhaust: None normally required. Local exhaust may be needed under special circumstances such as poorly ventilated areas, evaporation from large surfaces, spraying, heating, etc.

Mechanical Exhaust: Mechanical ventilation should be sufficient to maintain exposure levels below exposure limits.

9. Physical and Chemical Properties

Appearance

Clear/Colorless liquid

Specific Gravity (H20=1)

1.0-1.1

% volatile by volume

86-88%

% solid by weight

12-14%

Weight per gallon

8.7 - 8.8 lbs/gal

Theoretical VOC

0.65 - 0.67 lbs/gal

Color

Clear/Colorless

Odor Threshold

Mild Odor

pH

13 - 13.5

Boiling Point

212 °F (initial)

Vapor Pressure

> 0.1 mm Hg

Vapor Density

~ 1

Water Solubility

Complete.

Reactivity in Water: None.
Analytical VOC (EPA method 24) : 0.41 - 0.43 lbs/gal

10. Stability and Reactivity

10.1 Reactivity Information

Stable

Known Hazardous Reactions

Hazard Polymerization: Will not occur.

Conditions to Avoid

High heat

Incompatible Materials

Strong oxidizers, strong acids, strong bases, and combustible materials.

Hazardous Decomposition Products

Oxides of carbon

11. Toxicological Information

2-butoxyethanol [CASRN 000111-76-2]
ACUTE TOXICITY
-Oral LD50 (guinea pig) = 1.4 g/kg Eye irritation (rabbit): severe.
-Dermal LD50 (guinea pig) > 2 g/kg Skin irritation (rabbit): moderate.
-Inhalation LC50 (guinea pig) > 633 ppm, 1 hr
-Reproductive and Developmental Toxicity: Inhalation exposure of pregnant rabbits caused some lethality to the dam and fetus at 200 ppm, but there were no effects at 100 ppm and below. In another study by the same route irritancy was noted in the dams and a related fetotoxicity was observed at 100 and 200 ppm, but there were no effects 50 ppm and below. Birth defects were not noted in either study.
-Other Testing: Exposure of rats by inhalation to 2-butoxyethanol caused hemolysis, hemoglobinuria (blood in the urine) and a slight increase in liver weight. Other species, including man, were much less sensitive to hemolysis. The hemolytic effect seen in rats was transitory and/or reversible and not considered to be relevant to human health.
-Carcinogenicity: The National Toxicology Program (NTP, 1998) has conducted lifetime inhalation bioassays in rats and mice at concentrations up to 125 ppm and 250 ppm 2-butoxyethanol, respectively. NTP found no evidence of carcinogenic activity in male rats, equivocal evidence in female rats based on adrenal tumors, and some evidence in male and female mice based on liver hemangiosarcoma and forestomach tumors. The relevance of these findings to humans is questionable. NTP concludes that the human carcinogenic potential of this material cannot be determined at this time. [18,7-1,14-082400]

Sodium hydroxide [CASRN 001310-73-2]
ACUTE TOXICITY
-Oral LD50 (rat) = 300 - 500 mg/kg (believed to be)
-Dermal LD50 (rabbit) > 2 g/kg (believed to be)

[0,7-18,7,F,A,18-121900], [3-2,18,18,F,A-011701] Silicic acid, disodium salt [CASRN 006834-92-0]
ACUTE TOXICITY
-Oral LD50 (rat) = 847 mg/kg Eye irritation (rabbit): 0.1 ml, Corrosive
-Skin irritation (rabbit): Moist skin, Corrosive (At 4 hrs.)
-Sub chronic Data: In a study of rats fed sodium silicate in drinking water for three months, at 200, 600 and 1800 ppm, changes were reported in the blood chemistry of some animals, but no specific changes to the organs of the animals due to sodium silicate administration were observed in any of the dosage groups. Another study reported adverse effects to the kidneys of dogs fed sodium silicate in their diet at 2.4g/kg/day for 4 weeks, whereas rats fed the same dosage did not develop any

treatment-related effects. Decreased numbers of births and survival to weaning was reported for rats fed sodium silicate in their drinking water at 600 and 1200 ppm.
-Special Studies: Sodium silicate was not mutagenic to the bacterium E. Coli when tested in a mutagenicity bioassay. There are no known reports of carcinogenicity of sodium silicates. Frequent ingestion over extended periods of time of gram quantities of silicates is associated with the formation kidney stones and other siliceous urinary calculi in humans. Sodium silicate is not listed by IARC, NTP or OSHA as a carcinogen. [15,16-12,13,U,18,12-100200], [17,15-18,12,15-033100]

Sodium cumenesulfonate [CASRN 028348-53-0]
ACUTE TOXICITY
-Oral LD50 (rat) = 5.2 g/kg
-Dermal LD50 (rat) > 2.0 g/kg [17,13-13,E,F,18,2-110597]

Surfactant
ACUTE TOXICITY
-Oral LD50 (rat, ♀) = 2.83 ml/kg Eye Irritation (rabbit) = 0.005 ml (severe corneal injury)
-Oral LD50 (rat, ♂) = 2.33 ml/kg Eye Irritation (rabbit) = 0.5 ml; 15% dilution in water (severe corneal injury)
-Dermal LD50 (rabbit, 24 hr) = 2.83 ml/kg Dermal Irritation (rabbit) - 24 hr. uncovered (minimal capillary injection)
-Inhalation (rat, 8 hr, rm. tmp.) - mortality 0/6 Inhalation (rat, 8 hr, 170 °C) - mortality 0/6 [20,2-19,13,15,J,18-102300]

12. Ecological Information

2-butoxyethanol [CASRN 000111-76-2]
ECOTOXICITY
48 h LC50 (Daphnia) > 1,000 mg/l 24 h TLm Brine shrimp = 1,000 mg/l
96 h LC50 Fathead minnow = 1,700 mg/l IC50 bacteria > 5,000 mg/l
DEGRADATION
BOD 5 = 26 % (O2 consumption) COD (measured) = 2.25 mg/mg
BOD10 = 74 % ThOD (calculated) = 2.10 - 2.30 mg/mg
BOD20 = 88 % Kow (measured) = 0.83
28 d Sturm test = 90% (CO2 evolved) [20,2-1,2,18-011701]

Sodium hydroxide [CASRN 001310-73-2]
ECOTOXICITY
96 hr LC50 (mosquito fish) = 125 mg/l Golden shiner: fatal within 1 hour at pH >= 10.9
48 hr LC50 (bluegill) = 99 mg/l Bluegill: fatal within 1 hour at pH >= 10.5
Overview: Because of the high pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. [0,7-18,7,F,A,18-121900]

Silicic acid, disodium salt [CASRN 006834-92-0]
ECOTOXICITY
96 hr - LC50 (mosquitofish) = 530 mg/L 48 hr - LC50 (water flea) = 113 mg/L
96 hr EC50 (gambusia affnis) = 2,320 ppm 96 hr EC50 (amphipoda) = 160 ppm
96 hr - LC50 (scud) = 160 mg/L 28 d - LC50 (polychaete) = 210-250 g/L
96 hr EC50 (Lymnea) = 632 ppm 96 hr EC50 (daphnia magna) = 247 ppm
Terrestrial wildlife - Oral LD50 (mouse) = 770 mg/kg
Environmental Fate: This material is not persistent in aquatic systems, but its high pH when undiluted or unneutralized is acutely harmful to aquatic life. Diluted material yields dissolved silica in a form that is indistinguishable from natural dissolved silica. It does not contribute to BOD. This material does not bioaccumulate except in species that use silica as a structural material such as

diatoms and siliceous sponges. Where abnormally low natural silica concentrations exist (less than 0.1 ppm), dissolved silica may be a limiting nutrient for diatoms and a few other aquatic algal species. However, the addition of excess dissolved silica over the limiting concentration will not stimulate the growth of diatom populations; their growth rate is independent of silica concentration once the limiting concentration is exceeded. Neither silica nor sodium will appreciably bioconcentrate up the food chain [14,23-20,C,G,18,12,15-121898], [15,16-12,13,U,18,12-100200]

Sodium cumenesulfonate [CASRN 028348-53-0]
ECOTOXICITY
96 hr LC50 (fathead minnow) > 1000 mg/L 24 & 48 hr EC50 (daphnia magna) >1000 mg/L
96 hr NOEC (fathead minnow) = 560 mg/L 24 & 48 hr NOEC (daphnia magna) >1000 mg/L
DEGRADATION Aerobic degradation: Modified Sturm test, classified "biodegradable".
The above data is for a 45% aqueous solution of sodium cumenesulfonate [17,13-13,E,F,18,2-110597]

Surfactant
ECOTOXICITY
48 hr - LC50 (daphnia magna) = 21.4 mg/L 96 hr - LC50 (fathead minnow) = 4.8 - 7.7 mg/L
96 hr - LC50 (fathead minnow) = 6.6 mg/L IC50 (bacteria) > 5000 mg/L
ENVIRONMENTAL FATE
BOD 5 3-18 % Closed Bottle BOD (% Oxygen cons.) = 16%
BOD 10 32-36 % Chemical Oxygen Demand (COD) - 2.23 mg/mg, measured
BOD 20 42-51% Chemical Oxygen Demand (COD) - 2.09 mg/mg, calc
DOC 7 61% STURM (% Carbon dioxide evolved) = 52.4-59%
DOC 14 66% Theoretical Oxygen Demand (ThOD) - 2.09 mg/mg, measured
DOC 21 70%
DOC 28 72%
Appropriate treatment of effluents will reduce levels of nonylphenol ethoxylate (NPE) residues to concentrations that should pose no harm to the environment, including protection for weak estrogen-mimetic activity observed for some degradation intermediates. [20,2-19,13,15,J,18-102300]

13. Disposal Considerations

Product Disposal Considerations:

In accordance with all federal, state and local requirements.

RCRA HAZARD CLASS

D002

14. Transportation Information

Hazardous Material Description (Proper shipping name, hazard class, hazard ID#, packing group):

Domestic ground non-bulk: UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., 8, PG III (SODIUM HYDROXIDE, DISODIUM TRIOXOSILCATE)
Domestic ground bulk: UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., 8, PG III (SODIUM HYDROXIDE, DISODIUM TRIOXOSILCATE)
International: UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., 8, PG III (SODIUM HYDROXIDE, DISODIUM TRIOXOSILCATE)

15. Regulatory Information

SARA TITLE III (313):

This product contains the following chemical(s) above deminis concentrations and may be subject to reporting under section 313: Reportable Category, Certain glycol ethers, < 10 %.

HMIS-Health:

2

HMIS-Fire:

1

HMIS-Reactivity:

0

16. Other Information

SDS Revision:

None

Date:

7/16/2018

SDS Author:

General Chemical Corp

Additional Information:

Disclaimer:

The development of this Safety Data Sheet (SDS) relies upon information provided to us by each of our raw material suppliers. This SDS will be updated as changes occur to their SDS(s).
We believe the recommendations and technical information contained herein to be accurate. However, they are given without warranty or guarantee, expressed or implied, and we assume no responsibility for losses or damage, direct or indirect, as a result of their use.

HEALTH	2
FIRE	1
REACTIVITY	0
PPE	0