

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

SECTION 1. IDENTIFICATION

Product name : Glycolic Acid - 70% Technical Solution

SDS-Identcode : 130000005166

Manufacturer or supplier's details

Company name of supplier : The Chemours Company FC, LLC

Address : 1007 Market Street
Wilmington, DE 19899 United States of America (USA)

Telephone : 1-844-773-CHEM (outside the U.S. 1-302-773-1000)

Emergency telephone : Medical emergency: 1-866-595-1473 (outside the U.S. 1-302-773-2000) ; Transport emergency: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

Recommended use of the chemical and restrictions on use

Recommended use : various

Restrictions on use : Personal care, For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Acute toxicity (Inhalation) : Category 4

Skin corrosion : Category 1

Serious eye damage : Category 1

GHS label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H314 Causes severe skin burns and eye damage.
H332 Harmful if inhaled.

Precautionary Statements : **Prevention:**
P261 Avoid breathing mist or vapors.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

Response:

P301 + P330 + P331 + P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

P303 + P361 + P353 + P310 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 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/doctor.

P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

Corrosive to the respiratory tract.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Glycolic acid	79-14-1	$\geq 50 - < 70$
Formic acid	64-18-6	$\geq 0.1 - < 1$
Methoxyacetic acid	625-45-6	$\geq 0.1 - < 1$

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

- | | |
|-------------------------|---|
| General advice | : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice. |
| If inhaled | : If inhaled, remove to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
Get medical attention immediately. |
| In case of skin contact | : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. |

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

- Get medical attention immediately.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
If easy to do, remove contact lens, if worn.
Get medical attention immediately.
- If swallowed : If swallowed, DO NOT induce vomiting.
If vomiting occurs have person lean forward.
Call a physician or poison control center immediately.
Rinse mouth thoroughly with water.
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : Inhalation may provoke the following symptoms:
Cough
Shortness of breath
Pain
Irritation
Skin contact may provoke the following symptoms:
Irritation
Rash
Necrosis
Discomfort
Eye contact may provoke the following symptoms:
Corrosion
Ulceration
Severe irritation
Ingestion may provoke the following symptoms:
Gastrointestinal discomfort
Nausea
Vomiting
Diarrhea
Causes serious eye damage.
Harmful if inhaled.
Causes severe burns.
Causes digestive tract burns.
Corrosive to respiratory system.
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.
- Notes to physician : Treat symptomatically and supportively.
-

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing : None known.

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

media

Specific hazards during fire fighting : Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon oxides

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions : Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g., by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material.
For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use with local exhaust ventilation.

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version 9.2 Revision Date: 04/09/2019 SDS Number: 1328805-00040 Date of last issue: 02/14/2019
Date of first issue: 02/27/2017

- Advice on safe handling : Do not get on skin or clothing.
Do not breathe vapors or spray mist.
Do not swallow.
Do not get in eyes.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
Keep container tightly closed.
Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage : Keep in properly labeled containers.
Store locked up.
Keep tightly closed.
Keep in a cool, well-ventilated place.
Store in accordance with the particular national regulations.
Reacts with many metals to liberate hydrogen gas which can form explosive mixtures with air. Hydrogen, a highly flammable gas, can accumulate to explosive concentrations inside drums, or any types of steel containers or tanks upon storage.
- Materials to avoid : Do not store with the following product types:
Strong oxidizing agents
Organic peroxides
Explosives
- Recommended storage temperature : < 122 °F / < 50 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Formic acid	64-18-6	TWA	5 ppm	ACGIH
		STEL	10 ppm	ACGIH
		TWA	5 ppm 9 mg/m ³	NIOSH REL
		TWA	5 ppm 9 mg/m ³	OSHA Z-1

Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Carbon dioxide	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		TWA	5,000 ppm 9,000 mg/m ³	OSHA Z-1

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version 9.2 Revision Date: 04/09/2019 SDS Number: 1328805-00040 Date of last issue: 02/14/2019
Date of first issue: 02/27/2017

		TWA	5,000 ppm 9,000 mg/m ³	NIOSH REL
		ST	30,000 ppm 54,000 mg/m ³	NIOSH REL

Engineering measures : Processing may form hazardous compounds (see section 10).
Minimize workplace exposure concentrations.
Use with local exhaust ventilation.

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Material : Chloroprene
Break through time : > 480 min
Glove thickness : 0.6 mm

Remarks

: Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Eye protection

: Wear the following personal protective equipment:
Chemical resistant goggles must be worn.
If splashes are likely to occur, wear:
Face-shield

Skin and body protection

: Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Hygiene measures

: Ensure that eye flushing systems and safety showers are located close to the working place.
When using do not eat, drink or smoke.
Wash contaminated clothing before re-use.

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: light yellow
Odor	: mild, of burnt sugar
Odor Threshold	: No data available
pH	: 0.1 (77 °F / 25 °C)
Melting point/freezing point	: 50 °F / 10 °C
Initial boiling point and boiling range	: 234 °F / 112 °C (1,013 hPa)
Flash point	: > 212 °F / > 100 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Flammability (liquids)	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapor pressure	: 0.0041 hPa (77 °F / 25 °C)
Relative vapor density	: No data available
Density	: 1.27 g/cm ³ (68 °F / 20 °C)
Solubility(ies)	
Water solubility	: > 300 g/l (for a component of this mixture) (72 °F / 22 °C)
Partition coefficient: n-octanol/water	: log Pow: -1.07 (68 °F / 20 °C) (for a component of this mixture)
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: 6.149 mPa.s (73 °F / 23 °C)
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle size : Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Can react with strong oxidizing agents.
Hazardous decomposition products will be formed at elevated temperatures.

Conditions to avoid : None known.

Incompatible materials : Oxidizing agents
Bases

Hazardous decomposition products

Thermal decomposition : Carbon dioxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Harmful if inhaled.

Product:

Acute oral toxicity : Acute toxicity estimate: 2,981 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 4.91 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Components:

Glycolic acid:

Acute oral toxicity : LD50 (Rat): 2,040 mg/kg
Method: US EPA Test Guideline OPP 81-1

Acute inhalation toxicity : LC50 (Rat): 3.6 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : Assessment: The substance or mixture has no acute dermal toxicity

Formic acid:

Acute oral toxicity : LD50 (Rat): 730 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 7.85 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: OECD Test Guideline 403
Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Remarks: Based on data from similar materials

Methoxyacetic acid:

Acute oral toxicity : LD50 (Rat): 1,000 mg/kg

Skin corrosion/irritation

Causes severe burns.

Components:

Glycolic acid:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Corrosive after 3 minutes to 1 hour of exposure

Formic acid:

Result : Corrosive after 3 minutes or less of exposure
Remarks : Based on harmonised classification in EU regulation
1272/2008, Annex VI

Methoxyacetic acid:

Species : Rabbit
Result : Corrosive after 3 minutes to 1 hour of exposure

Serious eye damage/eye irritation

Causes serious eye damage.

Components:

Glycolic acid:

Species : Rabbit
Result : Irreversible effects on the eye
Method : OECD Test Guideline 405

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

Formic acid:

Result	:	Irreversible effects on the eye
Remarks	:	Based on skin corrosivity.

Methoxyacetic acid:

Result	:	Irreversible effects on the eye
Remarks	:	Based on skin corrosivity.

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Components:

Glycolic acid:

Test Type	:	Buehler Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	negative

Formic acid:

Test Type	:	Buehler Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	negative

Germ cell mutagenicity

Not classified based on available information.

Components:

Glycolic acid:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Method: OECD Test Guideline 471 Result: negative
-----------------------	---	---

	:	Test Type: Chromosome aberration test in vitro Method: OECD Test Guideline 473 Result: negative
--	---	---

	:	Test Type: In vitro mammalian cell gene mutation test Method: OECD Test Guideline 476 Result: negative
--	---	--

Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse
----------------------	---	--

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

Application Route: Ingestion
Method: OECD Test Guideline 474
Result: negative

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

Formic acid:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Test Type: Sex-linked recessive lethal test in Drosophila melanogaster (in vivo)
Application Route: Ingestion
Method: OECD Test Guideline 477
Result: negative

Methoxyacetic acid:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Result: negative

Carcinogenicity

Not classified based on available information.

Components:

Glycolic acid:

Species : Mouse
Application Route : Skin contact
Exposure time : 40 weeks
Result : negative

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen

Formic acid:

Species : Rat
Application Route : Ingestion
Exposure time : 104 weeks
Result : negative
Remarks : Based on data from similar materials

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version 9.2	Revision Date: 04/09/2019	SDS Number: 1328805-00040	Date of last issue: 02/14/2019 Date of first issue: 02/27/2017
----------------	------------------------------	------------------------------	---

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Product:

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

Components:

Glycolic acid:

Effects on fertility : Test Type: One-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Method: Regulation (EC) No. 440/2008, Annex, B.34
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 414
Result: negative

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

Formic acid:

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 416
Result: negative
Remarks: Based on data from similar materials

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rabbit
Application Route: Ingestion
Method: OECD Test Guideline 414
Result: negative
Remarks: Based on data from similar materials

Methoxyacetic acid:

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Mouse
Application Route: Ingestion
Result: positive

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: Ingestion

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

Result: positive

Reproductive toxicity - Assessment : Clear evidence of adverse effects on sexual function and fertility, based on animal experiments., Clear evidence of adverse effects on development, based on animal experiments.

STOT-single exposure

Not classified based on available information.

Components:

Methoxyacetic acid:

Routes of exposure : Ingestion
Target Organs : Immune system
Assessment : Shown to produce significant health effects in animals at concentrations of 300 mg/kg bw or less.

STOT-repeated exposure

Not classified based on available information.

Components:

Methoxyacetic acid:

Routes of exposure : Ingestion
Target Organs : thymus gland
Assessment : Shown to produce significant health effects in animals at concentrations of >10 to 100 mg/kg bw.

Repeated dose toxicity

Components:

Glycolic acid:

Species : Rat, male and female
NOAEL : 150 mg/kg
LOAEL : 300 mg/kg
Application Route : Ingestion
Exposure time : 90 Days
Method : OECD Test Guideline 408

Formic acid:

Species : Rat
NOAEL : 400 mg/kg
Application Route : Ingestion
Exposure time : 52 Weeks
Remarks : Based on data from similar materials

Methoxyacetic acid:

Species : Rat
LOAEL : > 10 - 100 mg/kg
Application Route : Ingestion
Exposure time : 13 Weeks

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

Remarks : Based on data from similar materials

Aspiration toxicity

Not classified based on available information.

Experience with human exposure

Product:

Inhalation : Symptoms: At atmospheric temperature, this product has only a minimal risk of inhalation due to its low vapor pressure., Inhalation of aerosol or fine spray mist may cause serious respiratory problems., Corrosive to the respiratory tract.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Glycolic acid:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 114.8 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 99.6 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 31.2 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 14.4 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Formic acid:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 130 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 365 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 1,240 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

EC10 (Pseudokirchneriella subcapitata (green algae)): 295 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : NOEC: 72 mg/l
Exposure time: 13 d

Methoxyacetic acid:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 500 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): 66.2 mg/l
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50: > 1,000 mg/l
Exposure time: 30 min
Method: OECD Test Guideline 209

Persistence and degradability

Components:

Glycolic acid:

Biodegradability : Result: Readily biodegradable.
Method: OECD Test Guideline 301B

Formic acid:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 100 %
Exposure time: 28 d
Method: OECD Test Guideline 301C

Methoxyacetic acid:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 98 %
Exposure time: 28 d
Method: OECD Test Guideline 301A

Bioaccumulative potential

Components:

Glycolic acid:

Partition coefficient: n- : log Pow: -1.07

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

octanol/water

Formic acid:

Partition coefficient: n-octanol/water : log Pow: -2.1

Methoxyacetic acid:

Partition coefficient: n-octanol/water : log Pow: -0.68
Remarks: Calculation

Mobility in soil

No data available

Other adverse effects

Product:

Results of PBT and vPvB assessment : Non-classified PBT substance Non-classified vPvB substance

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3265
Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(Glycolic acid)
Class : 8
Packing group : II
Labels : 8

IATA-DGR

UN/ID No. : UN 3265
Proper shipping name : Corrosive liquid, acidic, organic, n.o.s.
(Glycolic acid)
Class : 8
Packing group : II
Labels : Corrosive
Packing instruction (cargo aircraft) : 855
Packing instruction (passenger aircraft) : 851

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version 9.2 Revision Date: 04/09/2019 SDS Number: 1328805-00040 Date of last issue: 02/14/2019
Date of first issue: 02/27/2017

IMDG-Code

UN number : UN 3265
Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(Glycolic acid)
Class : 8
Packing group : II
Labels : 8
EmS Code : F-A, S-B
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number : UN 3265
Proper shipping name : Corrosive liquid, acidic, organic, n.o.s.
(Glycolic acid)
Class : 8
Packing group : II
Labels : CORROSIVE
ERG Code : 153
Marine pollutant : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Formaldehyde	50-00-0	100	197238
Formic acid	64-18-6	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Formaldehyde	50-00-0	100	197238

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version 9.2 Revision Date: 04/09/2019 SDS Number: 1328805-00040 Date of last issue: 02/14/2019
Date of first issue: 02/27/2017

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Pennsylvania Right To Know

Glycolic acid	79-14-1
Water	7732-18-5
Formic acid	64-18-6
Formaldehyde	50-00-0

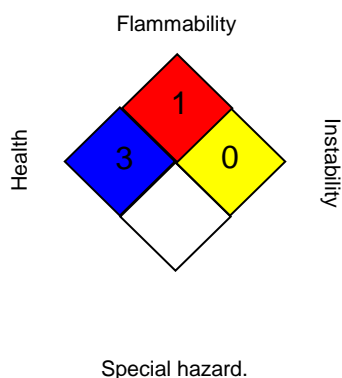
California Prop. 65

WARNING: This product can expose you to chemicals including Formaldehyde, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:

HEALTH	/	3
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Chemours™ and the Chemours Logo are trademarks of The Chemours Company.
Before use read Chemours safety information.
For further information contact the local Chemours office or nominated distributors.
All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA Z-1	: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	: 8-hour, time-weighted average
ACGIH / STEL	: Short-term exposure limit
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-1 / TWA : 8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 04/09/2019

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

SAFETY DATA SHEET



Glycolic Acid - 70% Technical Solution

Version	Revision Date:	SDS Number:	Date of last issue: 02/14/2019
9.2	04/09/2019	1328805-00040	Date of first issue: 02/27/2017

US / Z8