

Safety Data Sheet



SECTION 1: Identification of the substance/mixture and the company/undertaking

1.1 Production identifiers

Product name : GLYCOLIC ACID 70% TECHNICAL GRADE
Brand : CJ Chemicals LLC
CAS-No. : 79-14-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : CJ Chemicals LLC
3469 E Grand River Rd #112
Howell, MI 48843
United States

Telephone : +1 (888) 274-1044

1.4 Emergency Telephone

Emergency Phone # : 1-800-424-9300 CHEMTREC (USA)
1-703-527-3887 CHEMTREC (international) 24 hours/day; 7 days/week

SECTION 2. HAZARDS IDENTIFICATION

Product hazard category

Acute toxicity (Inhalation)	Category 4
Skin corrosion	Category 1A
Serious eye damage/eye irritation	Category 1

Label content

Pictogram :



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Signal word : Danger

Hazardous warnings : Causes severe skin burns and eye damage.
Harmful if inhaled.

Hazardous prevention measures : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing.
Rinse skin with water/ shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/ container to an approved waste disposal plant.

Other hazards

No applicable data available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Glycolic acid	79-14-1	68 - 72 %
Formic acid	64-18-6	0.1 - 1 %

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Methoxyacetic acid	625-45-6	0.1 - 1 %
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SECTION 4. FIRST AID MEASURES

- General advice : When symptoms persist or in all cases of doubt seek medical advice.
- Inhalation : Move to fresh air. Oxygen or artificial respiration if needed. Consult a physician.
- Skin contact : Wash off immediately with plenty of water. Take off all contaminated clothing immediately. Consult a physician. Wash contaminated clothing before re-use.
- Eye contact : Rinse immediately with plenty of water and seek medical advice.
- Ingestion : Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person.
- Most important symptoms/effects, acute and delayed : No applicable data available.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : No applicable data available.
- Specific hazards : No applicable data available.

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Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.

Further information : Will react with most metals, releasing potentially explosive hydrogen gas.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel) : Use personal protective equipment.

Environmental precautions : Try to prevent the material from entering drains or water courses.

Spill Cleanup : Neutralize spill with lime or soda ash. If this product is spilled and not recovered, or is recovered as a waste for treatment or disposal, the CERCLA Reportable Quantity is 100 lbs. (release of an Unlisted Hazardous Waste with the Characteristic of Corrosivity.)

Accidental Release Measures : No applicable data available.

SECTION 7. HANDLING AND STORAGE

Handling (Personnel) : Avoid breathing mist. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Wear personal protective equipment. Provide sufficient air exchange and/or exhaust in work rooms.

Handling (Physical Aspects) : No applicable data available.

Dust explosion class : Not applicable

Storage : Keep in a well-ventilated place. Keep tightly closed. Keep away from heat.

Storage period : No applicable data available.

Storage temperature : < 50 °C (< 122 °F)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : Use only with adequate ventilation.

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Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection : Material: Impervious gloves

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

Eye protection : Wear coverall chemical splash goggles.

Skin and body protection : Where there is potential for skin contact have available and wear as appropriate:
Complete suit protecting against chemicals.

Exposure Guidelines

Exposure Limit Values

Glycolic acid			
AEL *	(DUPONT)	10 mg/m ³	8 & 12 hr. TWA

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state : liquid
Form : liquid
Color : light yellow

Odor : mild, of burnt sugar

Odor threshold : No applicable data available.

pH : 0.1 at 25 °C (77 °F)

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Melting point/freezing point	: Melting point 10 °C (50 °F)
Boiling point/boiling range	: Boiling point 112 °C (234 °F) at 760 mm Hg
Flash point	: does not flash
Evaporation rate	: No applicable data available.
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: No applicable data available.
Lower explosion limit	: No applicable data available.
Vapor pressure	: 0.017 hPa at 25 °C (77 °F)
Vapour density	: No applicable data available.
Density	: 1.27 g/cm ³ at 20 °C (68 °F)
Specific gravity (Relative density)	: No applicable data available.
Water solubility	: completely miscible
Solubility(ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: log Pow: -1.11 at 19 °C (66 °F)
Auto-ignition temperature	: No applicable data available.
Decomposition temperature	: No applicable data available.
Viscosity, kinematic	: No applicable data available.
Viscosity 3.49 mPa.s at 43.3 °C (109.9 °F)	: 11.28 mPa.s at 15.6 °C (60.1 °F)
Oxidising Substance	: May cause or intensify fire; oxidiser.

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SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable under recommended storage conditions.
Chemical stability	:	Stable
Possibility of hazardous reactions	:	Polymerization will not occur.
Conditions to avoid	:	No applicable data available.
Incompatible materials	:	Oxidizing agents Cyanides, Sulphides, active metals (such as sodium, potassium, magnesium)
Hazardous decomposition products	:	Decomposition will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

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Sensitisation	: animals (unspecified species)Not a skin sensitizer.
Reproductive toxicity	: No toxicity to reproduction
Glycolic acid	
Inhalation 4 h LC50	: 3.6 mg/l , Rat Dust
Dermal Acute toxicity estimate	: > 5,000 mg/kg , human
Oral LD50	: 2,040 mg/kg , Rat
Skin irritation	: Causes burns., Rabbit
Eye irritation	: Corrosive, Rabbit
Repeated dose toxicity	: Oral Rat - NOAEL: 150 mg/kgMethod: OECD Test Guideline 408 Organ weight changes, Kidney effects
Carcinogenicity	: Not classifiable as a human carcinogen. Animal testing did not show any carcinogenic effects.

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Mutagenicity : Animal testing did not show any mutagenic effects.
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Teratogenicity : Evidence suggests the substance is not a developmental toxin in animals.

Formic acid

Inhalation 4 h LC50 : 7.4 mg/l , Rat

Oral LD50 : 730 mg/kg , Rat

Skin irritation : Causes severe burns., Not tested on animals

Eye irritation : Corrosive, Not tested on animals

Carcinogenicity : Not classifiable as a human carcinogen.
Animal testing did not show any carcinogenic effects.
Information given is based on data obtained from similar substances.

Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Did not cause genetic damage in cultured bacterial cells.
Genetic damage in cultured mammalian cells was observed in some laboratory tests but not in others.
Did not cause genetic damage in insects.

Teratogenicity : Animal testing showed no developmental toxicity.
Information given is based on data obtained from similar substances.

Methoxyacetic acid

Oral LD50 : 1,000 mg/kg , Rat

Skin irritation : Causes burns., Rabbit

Eye irritation : Corrosive, Rabbit

Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Teratogenicity : Animal testing showed effects on embryo-foetal development at levels below those causing maternal toxicity.

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Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

Glycolic acid

96 h LC50	:	Pimephales promelas (fathead minnow) 164 mg/l
72 h ErC50	:	Pseudokirchneriella subcapitata (green algae) 44 mg/l OECD Test Guideline 201
72 h NOEC	:	Pseudokirchneriella subcapitata (green algae) 20 mg/l OECD Test Guideline 201
48 h EC50	:	Daphnia magna (Water flea) 141 mg/l OECD Test Guideline 202

Formic acid

96 h LC50	:	Leuciscus idus (Golden orfe) > 46 mg/l Information given is based on data obtained from similar substances.
72 h ErC50	:	Algae 26.9 mg/l
48 h EC50	:	Daphnia magna (Water flea) 34.2 mg/l
21 d	:	NOEC Daphnia magna (Water flea) 100 mg/l

Methoxyacetic acid

96 h LC50	:	Danio rerio (zebra fish) > 500 mg/l
72 h EC50	:	Desmodesmus subspicatus (green algae) 66.2 mg/l
48 h EC50	:	Daphnia magna (Water flea) 68.3 mg/l

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Environmental Fate

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Biodegradability : Readily biodegradable, according to appropriate OECD test.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods - Product : Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations. May be a RCRA hazardous waste due to the corrosivity characteristic (pH).

Contaminated packaging : Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

DOT	UN number	: 3265
	Proper shipping name	: Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid)
	Class	: 8
	Packing group	: II
	Labelling No.	: 8
IATA_C	UN number	: 3265
	Proper shipping name	: Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid)
	Class	: 8
	Packing group	: II
	Labelling No.	: 8
IMDG	UN number	: 3265
	Proper shipping name	: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Glycolic acid)
	Class	: 8
	Packing group	: II
	Labelling No.	: 8

SECTION 15. REGULATORY INFORMATION

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TSCA : On the inventory, or in compliance with the inventory
SARA 313 Regulated Chemical(s) : 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.

SECTION 16. OTHER INFORMATION

Restrictions for use : Do not use technical grades in personal care applications due to higher level of impurities.

The DuPont Oval Logo is a registered trademark of E.I. du Pont de Nemours and Company.

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Contact person : MSDS Coordinator, DuPont Chemicals and Fluoroproducts, Wilmington, DE 19898, (800) 441-7515

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