



COVID-19 is an emerging, rapidly evolving situation.

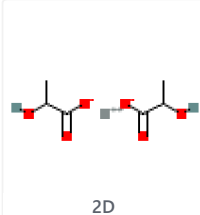
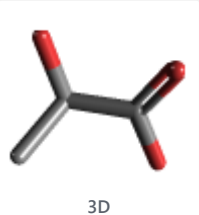



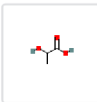

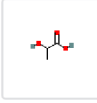
Get the latest public health information from CDC: <https://www.coronavirus.gov>.

Get the latest research from NIH: <https://www.nih.gov/coronavirus>.



COMPOUND SUMMARY

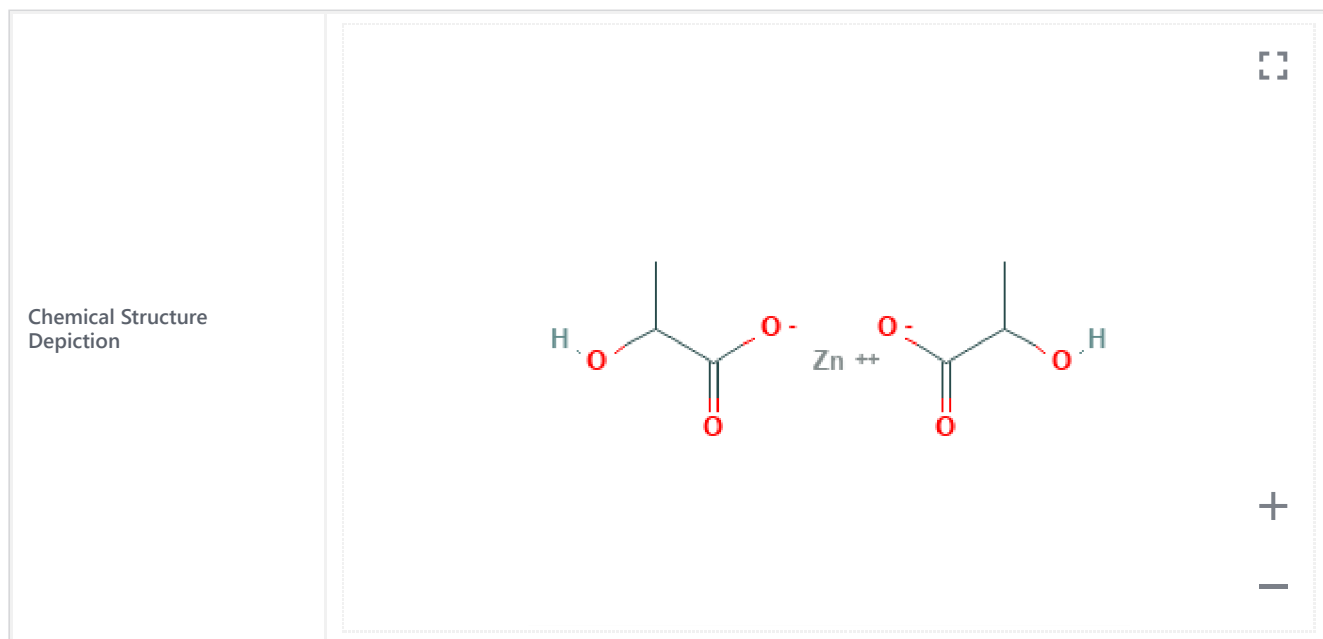
Zinc lactate

PubChem CID:	3007856
Structure:	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>2D</p> </div> <div style="text-align: center;">  <p>3D</p> </div> </div> <p style="text-align: center;">Find Similar Structures</p>
Chemical Safety:	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Corrosive</p> </div> <div style="text-align: center;">  <p>Irritant</p> </div> <div style="text-align: center;">  <p>Environmental Hazard</p> </div> </div> <p style="text-align: center;">Laboratory Chemical Safety Summary (LCSS) Datasheet</p>
Molecular Formula:	C ₆ H ₁₀ O ₆ Zn
Synonyms:	<p>ZINC LACTATE 16039-53-5 Zinc bis(2-hydroxypropanoate) UNII-2GXR25858Y 554-05-2</p> <p>More...</p>
Molecular Weight:	243.5 g/mol
Parent Compound:	<div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;">  </div> <div> <p>CID 612 (Lactic acid)</p> </div> </div>
Component Compounds:	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="text-align: center; margin-right: 10px;">  </div> <div> <p>CID 23994 (Zinc)</p> </div> </div> <div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;">  </div> <div> <p>CID 612 (Lactic acid)</p> </div> </div>
Dates:	<p>Modify: 2020-08-15 Create: 2005-08-01</p>

1 Structures



1.1 2D Structure

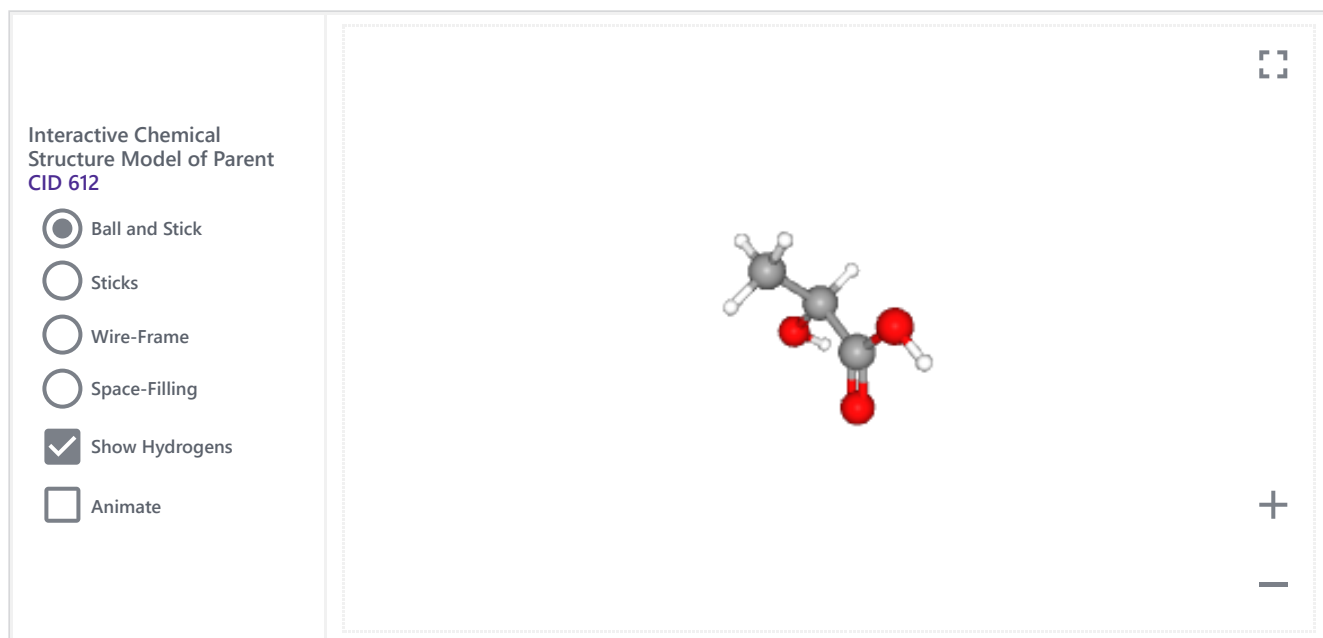


► PubChem

1.2 3D Conformer



3D Conformer of Parent



► PubChem

2 Names and Identifiers

2.1 Computed Descriptors

2.1.1 IUPAC Name

zinc;2-hydroxypropanoate

Computed by LexiChem 2.6.6 (PubChem release 2019.06.18)

[▶ PubChem](#)

2.1.2 InChI

InChI=1S/2C3H6O3.Zn/c2*1-2(4)3(5)6;/h2*2,4H,1H3,(H,5,6);/q;+2/p-2

Computed by InChI 1.0.5 (PubChem release 2019.06.18)

[▶ PubChem](#)

2.1.3 InChI Key

CANRESZKMUPMAE-UHFFFAOYSA-L

Computed by InChI 1.0.5 (PubChem release 2019.06.18)

[▶ PubChem](#)

2.1.4 Canonical SMILES

CC(C(=O)[O-])O.CC(C(=O)[O-])O.[Zn+2]

Computed by OEChem 2.1.5 (PubChem release 2019.06.18)

[▶ PubChem](#)

2.2 Molecular Formula

C₆H₁₀O₆Zn

Computed by PubChem 2.1 (PubChem release 2019.06.18)

[▶ PubChem](#)

2.3 Other Identifiers

2.3.1 CAS

6155-68-6

[▶ EPA Chemicals under the TSCA; European Chemicals Agency \(ECHA\)](#)

16039-53-5

[▶ European Chemicals Agency \(ECHA\)](#)

2.3.2 European Community (EC) Number

[240-178-9](#)[▶ European Chemicals Agency \(ECHA\)](#)[228-175-0](#)[▶ European Chemicals Agency \(ECHA\)](#)

2.3.3 UNII



2GXR25858Y

[▶ FDA/SPL Indexing Data](#)

2.3.4 Wikipedia



Zinc lactate

[▶ Wikipedia](#)

2.4 Synonyms



2.4.1 Depositor-Supplied Synonyms



ZINC LACTATE	SCHEMBL118974
16039-53-5	NIOSH/OD6500000
Zinc bis(2-hydroxypropanoate)	CTK0H4952
UNII-2GXR25858Y	DTXSID70970746
554-05-2	AKOS015901741
6155-68-6	Lactic acid, zinc salt (2:1), DL-
2GXR25858Y	SC-25623
C6H10O6Zn	OD65000000
Zinc DL-lactate	V1168
Zinc, bis[2-(hydroxy-kappaO)propanoato-kappaO]-, (T-4)-	Q27155010
Propanoic acid, 2-hydroxy-, zinc salt (2:1)	Zinc, bis[2-(hydroxy-kO)propanoato-kO]-, (T-4)-
zinc 2-hydroxypropanoic acid	
LACTIC ACID ZINC SALT	

[▶ PubChem](#)

3 Chemical and Physical Properties



3.1 Computed Properties



Property Name	Property Value	Reference
Molecular Weight	243.5 g/mol	Computed by PubChem 2.1 (PubChem release 2019.06.18)
Hydrogen Bond Donor Count	2	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Hydrogen Bond Acceptor Count	6	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Rotatable Bond Count	0	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Exact Mass	241.97688 g/mol	Computed by PubChem 2.1 (PubChem release 2019.06.18)
Monoisotopic Mass	241.97688 g/mol	Computed by PubChem 2.1 (PubChem release 2019.06.18)
Topological Polar Surface Area	121 Å ²	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Heavy Atom Count	13	Computed by PubChem
Formal Charge	0	Computed by PubChem
Complexity	53.5	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Isotope Atom Count	0	Computed by PubChem
Defined Atom Stereocenter Count	0	Computed by PubChem
Undefined Atom Stereocenter Count	2	Computed by PubChem
Defined Bond Stereocenter Count	0	Computed by PubChem
Undefined Bond Stereocenter Count	0	Computed by PubChem
Covalently-Bonded Unit Count	3	Computed by PubChem
Compound Is Canonicalized	Yes	Computed by PubChem (release 2019.01.04)

► [PubChem](#)





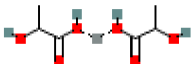
4 Related Records



4.1 Related Compounds with Annotation



168 items [View More Rows & Details](#)

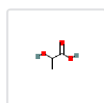
Structure	Compound CID	Name	Molecular Formula	Molecular Weight, g/mol
	13144	Calcium lactate	$C_6H_{10}CaO_6$	218.22
	13145	Cupric lactate	$C_6H_{10}CuO_6$	241.69
	13146	Mercury(2+) lactate	$C_6H_{10}HgO_6$	378.73
	22197	Iron(II) lactate	$C_6H_{10}FeO_6$	233.98
	27653	Zinc dilactate	$C_6H_{12}O_6Zn$	245.5

SORT BY Compound CID

1 2 3 ... 34 Next >

[PubChem](#)

4.2 Parent Compound



CID 612 (Lactic acid)

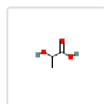
[PubChem](#)

4.3 Component Compounds





CID 23994 (Zinc)



CID 612 (Lactic acid)

[▶ PubChem](#)

4.4 Related Compounds



Same Connectivity	4 Records
Same Parent, Connectivity	780 Records
Same Parent, Stereo	614 Records
Same Parent, Isotope	688 Records
Same Parent, Exact	551 Records
Mixtures, Components, and Neutralized Forms	2 Records
Similar Compounds	169 Records

[▶ PubChem](#)

4.5 Substances



4.5.1 Related Substances



Same	38 Records
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[▶ PubChem](#)

4.5.2 Substances by Category

[▶ PubChem](#)

4.6 Entrez Crosslinks



PubMed	1 Record
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▶ PubChem

5 Chemical Vendors



▶ [PubChem](#)

6 Use and Manufacturing



6.1 Use Classification



Cosmetics -> Deodorant

S13 | EUCOSMETICS | Combined Inventory of Ingredients Employed in Cosmetic Products (2000) and Revised Inventory (2006) | DOI:10.5281/zenodo.2624118

▶ [NORMAN Suspect List Exchange](#)

6.2 General Manufacturing Information



EPA TSCA Commercial Activity Status

[Propanoic acid](#), 2-hydroxy-, zinc salt (1:1), (2S)-: INACTIVE

<https://www.epa.gov/tsca-inventory>

▶ [EPA Chemicals under the TSCA](#)

7 Safety and Hazards






7.1 Hazards Identification



7.1.1 GHS Classification



Showing 1 of 2 [View More](#)

Pictogram(s)	   <p>Corrosive Irritant Environmental Hazard</p>
Signal	<u>Danger</u>
GHS Hazard Statements	<p>Aggregated GHS information provided by 102 companies from 5 notifications to the ECHA C&L Inventory. Each notification may be associated with multiple companies.</p> <p>Reported as not meeting GHS hazard criteria by 37 of 102 companies. For more detailed information, please visit ECHA C&L website</p> <p>Of the 4 notification(s) provided by 65 of 102 companies with hazard statement code(s):</p> <p>H302 (41.54%): Harmful if swallowed [Warning Acute toxicity, oral]</p> <p>H315 (58.46%): Causes skin irritation [Warning Skin corrosion/irritation]</p> <p>H318 (40%): Causes serious eye damage [Danger Serious eye damage/eye irritation]</p> <p>H319 (58.46%): Causes serious eye irritation [Warning Serious eye damage/eye irritation]</p> <p>H335 (58.46%): May cause respiratory irritation [Warning Specific target organ toxicity, single exposure; Respiratory tract irritation]</p> <p>H400 (96.92%): Very toxic to aquatic life [Warning Hazardous to the aquatic environment, acute hazard]</p> <p>H410 (98.46%): Very toxic to aquatic life with long lasting effects [Warning Hazardous to the aquatic environment, long-term hazard]</p> <p>H412 (38.46%): Harmful to aquatic life with long lasting effects [Hazardous to the aquatic environment, long-term hazard]</p> <p>Information may vary between notifications depending on impurities, additives, and other factors. The percentage value in parenthesis indicates the notified classification ratio from companies that provide hazard codes. Only hazard codes with percentage values above 10% are shown.</p>
Precautionary Statement Codes	<p>P261, P264, P270, P271, P273, P280, P301+P312, P302+P352, P304+P340, P305+P351+P338, P310, P312, P321, P330, P332+P313, P337+P313, P362, P391, P403+P233, P405, and P501</p> <p>(The corresponding statement to each P-code can be found at the GHS Classification page.)</p>

► [European Chemicals Agency \(ECHA\)](#)

7.1.2 Hazard Classes and Categories



Acute Tox. 4 (41.54%)

Skin Irrit. 2 (58.46%)

Eye Dam. 1 (40%)

Eye Irrit. 2 (58.46%)

STOT SE 3 (58.46%)

Aquatic Acute 1 (96.92%)

Aquatic Chronic 1 (98.46%)

Aquatic Chronic 3 (38.46%)

► [European Chemicals Agency \(ECHA\)](#)

Acute Tox. 4 (100%)

▶ [European Chemicals Agency \(ECHA\)](#)

8 Literature



8.1 Depositor Provided PubMed Citations



▶ PubChem

8.2 Chemical Co-Occurrences in Literature



▶ PubChem

8.3 Chemical-Gene Co-Occurrences in Literature



▶ PubChem

8.4 Chemical-Disease Co-Occurrences in Literature



▶ PubChem

9 Patents



9.1 Depositor-Supplied Patent Identifiers



▶ [PubChem](#)

[Link to all deposited patent identifiers](#)

▶ [PubChem](#)

10 Classification



10.1 Ontologies



10.1.1 WIPO IPC



▶ WIPO

10.1.2 ChemIDplus



▶ ChemIDplus

10.1.3 UN GHS Classification



- ▶ UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

10.1.4 NORMAN Suspect List Exchange Classification



- ▶ NORMAN Suspect List Exchange

11 Information Sources



FILTER BY SOURCE

ALL SOURCES



1. EPA Chemicals under the TSCA

LICENSE

<https://www.epa.gov/privacy/privacy-act-laws-policies-and-resources>

Propanoic acid, 2-hydroxy-, zinc salt (1:1), (2S)-

<https://www.epa.gov/chemicals-under-tsca>

2. European Chemicals Agency (ECHA)

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<https://echa.europa.eu/web/guest/legal-notice>

Zinc dilactate

<https://echa.europa.eu/substance-information/-/substanceinfo/100.036.510>

zinc (S)-3-oxidopropionate

<https://echa.europa.eu/substance-information/-/substanceinfo/100.025.614>

Zinc dilactate

<https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/93561>

Zinc Lactate

<https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/210651>

3. FDA/SPL Indexing Data

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<https://www.fda.gov/about-fda/about-website/website-policies#linking>

2GXR25858Y

<https://www.fda.gov/ForIndustry/DataStandards/SubstanceRegistrationSystem-UniqueIngredientIdentifierUNII/>

4. NORMAN Suspect List Exchange

NORMAN Suspect List Exchange Classification

<https://www.norman-network.com/nds/SLE/>

5. Wikipedia

zinc lactate

<https://www.wikidata.org/wiki/Q27155010>

6. PubChem

<https://pubchem.ncbi.nlm.nih.gov>

7. WIPO

International Patent Classification

<http://www.wipo.int/classifications/ipc/>

8. UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

GHS Classification Tree

http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html

9. ChemIDplus

ChemIDplus Chemical Information Classification

<https://chem.nlm.nih.gov/chemidplus/>