## **Safety Data Sheet**

# Succinic acid melting point standard

Version: V2.0.0.1

Report No.: BWJ4702-2016-MSDS-US

Creation Date: 2025/11/11

Revision Date: -



#### \*Prepared according to American OSHA HCS-2024 (29 CFR 1910.1200)

1	Identification
	Tuerillicalion

## | Product identifier

Product Name	Succinic acid melting point standard
Cat No.	BWJ4702-2016
CAS No.	110-15-6
EC No.	203-740-4
Molecular Formula	C4H6O4

## Recommended use of the product and restrictions on use

Relevant identified uses	Please consult manufacturer.
Uses advised against	Please consult manufacturer.

## Details of the supplier of the Safety Data Sheet

Name of the company	Weiyel Inc		
Address of the company	Hedian Light Industrial Park, Chengguan Town, Shangcheng County, Xinyang City, Henan Province, China		
Post code	465350		
Telephone number	010-58103678		
Fax number	010-84840368		
E-mail address	info@weiyel.com		

## | Emergency phone number

Emergency phone number	010-58103678
Emergency bhone number	∥ ∪ IU-30 IU3070

2 Hazard(s) identification

## Hazard classification according to 29 CFR 1910.1200

Serious eye damage/irritation | Category 2

### Label elements

**Hazard pictograms** 



Signal word

Warning

### **Hazard statements**

H319 Causes serious eye irritation

## | Precautionary statements

Prevention

P264	Wash hands and other parts of the body (if related) thoroughly after handling.			
	Wear protective gloves/protective clothing/eye protection/face protection/hearing			
	protection.			

Response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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Storage

Storage Not applicable

Disposal

Disposal Not applicable

## Other hazards

Not applicable.

## | Hazard description

Physical and chemical hazards

No information available

Health hazards

Inhaled	Inhalation of the product may produce adverse health effects or irritation of the
	respiratory tract following discomfort.
Ingestion	Accidental ingestion of the product may be harmful to the health of the individual.
Skin Contact	Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
	• • • •
Eye	This product may cause serious eye irritation. Severe inflammation may be
	expected with pain following direct contact with the eye.

Environmental hazards

Please refer to 12th chapter of SDS.

# 3 Composition/information on ingredients

### | Substance/mixture

Substance

Component	CAS No.	EC No.	Concentration (wt, %)
Succinic acid 110-15-6		203-740-4	99.72

# 4 First-aid measures

## Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the
	doctor in attendance.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of soap and water for at least 15 minutes and consult a physician if feel

	uncomfortable.
Ingestion	Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing give artificial respiration and consult a physician immediately.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

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## Most important symptoms/effects, acute and delayed

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

## Indication of any immediate medical attention and special treatment needed

- 1 Treat symptomatically.
- 2 Symptoms may be delayed.

# Fire-fighting measures

## Extinguishing media

Suitable extinguishing media	Use extinguishing media suitable for surrounding area.		
Unsuitable extinguishing media	There is no restriction on the type of extinguisher which may be used.		

## Specific hazards arising from the substance or mixture

- 1 Development of hazardous combustion gases or vapor possible in the event of fire.
- 2 May expansion or decompose explosively when heated or involved in fire.

## Special protective equipment and precautions for fire-fighters

- As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
- 2 Fight fire from a safe distance, with adequate cover.
- 3 Prevent fire extinguishing water from contaminating surface water or the ground water system.

# 6 Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

- 1 Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
- 2 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
- 3 Use personal protective equipment, do not breathe dust/fume.

#### **Environmental precautions**

- 1 Prevent further leakage or spillage if safe to do so.
- 2 Discharge into the environment must be avoided.

### Methods and materials for containment and cleaning up

- 1 Cut off the source of the leak as much as possible.
- 2 Keep leaks in a ventilated place.
- 3 Isolation of contaminated areas and restrictions on access.
- 4 It is recommended that emergency personnel wear dust masks.

Collect the spill with a clean shovel and place it in a clean, dry, loosely closed container and move the container away from the leak.

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Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

# 7 Handling and storage

## Precautions for safe handling

- 1 Handling is performed in a well ventilated place.
- 2 Wear suitable protective equipment.
- 3 Avoid contact with skin and eyes.
- 4 Keep away from heat/sparks/open flames/ hot surfaces.

## Conditions for safe storage, including any incompatibilities

- 1 Keep containers tightly closed.
- 2 Keep containers in a dry, cool and well-ventilated place.
- 3 Keep away from heat/sparks/open flames/hot surfaces.
- 4 Store away from incompatible materials and foodstuff containers.

# 8 Exposure controls/personal protection

### **Control parameters**

Occupational exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m³	ppm	mg/m³
Succinic acid	Germany (AGS)	-	2	-	4
	Germany (DFG)	-	2	-	4
	Switzerland	-	2	-	5

### **Engineering controls**

- 1 Ensure adequate ventilation, especially in confined areas.
- 2 Ensure that eyewash stations and safety showers are close to the workstation location.
- 3 Use explosion-proof electrical/ventilating/lighting/equipment.
- 4 Set up emergency exit and necessary risk-elimination area.

### Personal protection equipment

General requirement	
Eye protection	Must wear appropriate safety goggles.
Hand protection	Must wear appropriate chemical protective gloves.
Respiratory protection	Must wear appropriate personal respiratory protective equipment.
Skin and body protection	Must wear appropriate chemical protective clothing and chemical resistant shoes.

9 Physical and chemical properties and safety characteristics

# | Physical and chemical properties

Appearance (physical state, color, etc.)  Odor No information available  No information available  PH 2.7 ( 20°C, 10g/L )  Melting point/freezing point(°C)  Initial boiling point and boiling range(°C)  Flash point(Closed cup, °C)  Evaporation rate  Flammability  Upper/lower explosive limits[%(v/v)]  Vapor pressure  Vapor density(Air = 1)  Relative density(Water=1)  Relative density(Water=1)  Auto-ignition temperature(°C)  Kinematic viscosity  No information available  white powder  No information available  2.7 ( 20°C, 10g/L )  185  235 ( 101.325 kPa )  236 ( 101.325 kPa )  206  Not applicable  No information available; Lower limit: No information available; Lower limit: No information available  1.57 ( 15°C )  Solubility  38g/L ( 25 °C )  -0.59  Kinematic viscosity  Not applicable	• • •	
Odor threshold Odor threshold No information available  PH 2.7 ( 20°C, 10g/L )  Melting point/freezing point(°C) 185  Initial boiling point and boiling range(°C) Flash point(Closed cup, °C) 206  Evaporation rate No information available  Upper/lower explosive limits[%(v/v)] Vapor pressure 2.5E-05Pa ( 25°C )  Vapor density(Air = 1) Relative density(Water=1) Solubility No information available  1.57 ( 15°C ) Solubility No information available  Ratorian density(Water=1) Solubility Auto-ignition temperature(°C) No information available  Pocomposition temperature(°C) Solubility No information available Solubility Auto-ignition temperature(°C) Solubility Solubility Auto-ignition temperature(°C) Solubility Solubility Auto-ignition temperature(°C) Solubility Solubility Solubility Solubility Solubility Solubility Auto-ignition temperature(°C) Solubility	Appearance (physical state,	white powder
Odor threshold pH 2.7 ( 20°C, 10g/L )  Melting point/freezing point(°C) 185  Initial boiling point and boiling range(°C) Flash point(Closed cup,°C) 206  Evaporation rate Flammability Upper/lower explosive limits[%(v/v)] Vapor pressure Vapor density(Air = 1) Relative density(Water=1) Auto-ignition temperature(°C) Pinitial boiling point and boiling range(°C)  Not applicable Votapper limit : No information available Upper limit : No information available ; Lower limit : No information available  1.57 ( 15°C )  Solubility Not applicable Pin-octanol/water partition coefficient Not information available  Not information available  2.58 C )  Not applicable	color, etc.)	
melting point/freezing point(°C)  Initial boiling point and boiling range(°C)  Flash point(Closed cup, °C)  Evaporation rate Not applicable  Flammability No information available  Upper/lower explosive limits[%(v/v)]  Vapor pressure Vapor density(Air = 1)  Relative density(Water=1)  Auto-ignition temperature(°C)  Decomposition temperature(°C)  185  235 ( 101.325 kPa )  206  Evaporation available Not applicable Upper limit : No information available ; Lower limit : No information available  1.57 ( 15°C )  83g/L ( 25 °C )  No information available  No information available	Odor	No information available
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Initial boiling point and boiling range(°C)  Flash point(Closed cup, °C)  Evaporation rate  Flammability  Upper/lower explosive limits[%(v/v)]  Vapor pressure  Vapor density(Air = 1)  Relative density(Water=1)  Auto-ignition temperature(°C)  Plash point(Closed cup, °C)  206  Not applicable  No information available  Upper limit : No information available ; Lower limit : No information available  1.56 (15°C)  Not applicable  1.57 (15°C)  83g/L (25°C)  -0.59  No information available  Pecomposition temperature(°C)  No information available  235 (101.325 kPa)  206  Not applicable  1.57 (15°C)  83g/L (25°C)  No information available	рН	2.7 ( 20°C, 10g/L )
range(°C)  Flash point(Closed cup, °C) 206  Evaporation rate Not applicable  Flammability No information available  Upper/lower explosive limits[%(v/v)]  Vapor pressure 2.5E-05Pa ( 25°C )  Vapor density(Air = 1) Not applicable  Relative density(Water=1) 1.57 ( 15°C )  Solubility 83g/L ( 25 °C )  n-octanol/water partition coefficient  Auto-ignition temperature(°C) No information available  Decomposition temperature(°C) 235	Melting point/freezing point(°C)	185
Flash point(Closed cup,°C) 206  Evaporation rate Not applicable  Flammability No information available  Upper/lower explosive limits[%(v/v)]  Vapor pressure 2.5E-05Pa ( 25°C )  Vapor density(Air = 1) Not applicable  Relative density(Water=1) 1.57 ( 15°C )  Solubility 83g/L ( 25 °C )  n-octanol/water partition coefficient  Auto-ignition temperature(°C) No information available  Decomposition temperature(°C) 235	Initial boiling point and boiling	235 ( 101.325 kPa )
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Flammability  Upper/lower explosive limits[%(v/v)]  Vapor pressure  Vapor density(Air = 1)  Relative density(Water=1)  Solubility  83g/L (25 °C)  n-octanol/water partition coefficient  Auto-ignition temperature(°C)  Decomposition temperature(°C)  Vapor density(Water=1)  No information available; Lower limit: No information available  Vapor density(Air = 1)  Not applicable  1.57 (15°C)  83g/L (25 °C)  -0.59  No information available  Decomposition temperature(°C)  235	Flash point(Closed cup,°C)	206
Upper/lower explosive limits[%(v/v)]  Vapor pressure  Vapor density(Air = 1)  Relative density(Water=1)  Solubility  Not applicable  83g/L (25 °C)  n-octanol/water partition coefficient  Auto-ignition temperature(°C)  Not information available; Lower limit: No information available  1.57 (15°C)  83g/L (25 °C)  No information available  Decomposition temperature(°C)  235	Evaporation rate	Not applicable
Iimits[%(v/v)]   Vapor pressure   2.5E-05Pa ( 25°C )     Vapor density(Air = 1)   Not applicable     Relative density(Water=1)   1.57 ( 15°C )     Solubility   83g/L ( 25 °C )     n-octanol/water partition coefficient   -0.59     Auto-ignition temperature(°C)   No information available     Decomposition temperature(°C)   235	Flammability	No information available
Vapor density(Air = 1) Not applicable  Relative density(Water=1) 1.57 ( 15°C )  Solubility 83g/L ( 25 °C )  n-octanol/water partition coefficient  Auto-ignition temperature(°C) No information available  Decomposition temperature(°C) 235		Upper limit: No information available; Lower limit: No information available
Relative density(Water=1)  Solubility  83g/L ( 25 °C )  n-octanol/water partition coefficient  Auto-ignition temperature(°C)  No information available  Decomposition temperature(°C)  235	Vapor pressure	2.5E-05Pa ( 25°C )
Solubility 83g/L ( 25 °C )  n-octanol/water partition coefficient  Auto-ignition temperature(°C) No information available  Decomposition temperature(°C) 235	Vapor density(Air = 1)	Not applicable
n-octanol/water partition coefficient  Auto-ignition temperature(°C) No information available  Decomposition temperature(°C) 235	Relative density(Water=1)	1.57 ( 15°C )
coefficient Auto-ignition temperature(°C) No information available  Decomposition temperature(°C) 235	Solubility	83g/L ( 25 °C )
Auto-ignition temperature(°C) No information available  Decomposition temperature(°C) 235	n-octanol/water partition	-0.59
Decomposition temperature(°C) 235	coefficient	
	Auto-ignition temperature(°C)	No information available
Kinematic viscosity Not applicable	Decomposition temperature(°C)	235
	Kinematic viscosity	Not applicable

# 10 Stability and reactivity

# | Stability and reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.	
Chemical stability	Stable under proper operation and storage conditions.	
Possibility of hazardous	No information available.	
reactions		
Conditions to avoid	Incompatible materials, heat, flame and spark.	
Incompatible materials	No information available.	
Hazardous decomposition	Under normal conditions of storage and use, hazardous decomposition products	
products	should not be produced.	

# 11 Toxicological information

# Acute toxicity

Component	LD <sub>50</sub> (oral)	LD <sub>50</sub> (dermal)	LC <sub>50</sub> (inhalation,4h)
Succinic acid	2260mg/kg(Rat)	No information available	No information available

# | Carcinogenicity

Component	List of carcinogens by	Report on Carcinogens	OSHA Carcinogen List
	the IARC Monographs	by NTP	

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Succinic acid	Not Listed	Not Listed	Not Listed

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## Others

Succinic acid(Component)		
Skin corrosion/irritation	Based on available data, the classification criteria are not met	
Serious eye damage/irritation	Causes serious eye irritation(Category 2)	
Skin sensitization	Based on available data, the classification criteria are not met	
Respiratory sensitization	Based on available data, the classification criteria are not met	
Reproductive toxicity	Based on available data, the classification criteria are not met	
STOT-single exposure	Based on available data, the classification criteria are not met	
STOT-repeated exposure	Based on available data, the classification criteria are not met	
Aspiration hazard	Based on available data, the classification criteria are not met	
Germ cell mutagenicity	Based on available data, the classification criteria are not met	

# 12 Ecological information

# Acute aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
Succinic acid	LC <sub>50</sub> :100mg/L (96h)(Fish)	EC <sub>50</sub> : 374mg/L	No information available
		(48h)(Crustaceans)	

# | Chronic aquatic toxicity

Chronic aquatic toxicity No information available

# | Persistence and degradability

Component	Persistence (water/soil)	Persistence (air)
Succinic acid	Low	Low

## | Bioaccumulative potential

Component	Bioaccumulative potential	Comments
Succinic acid	Low	Log Kow=-0.59

# Mobility in soil

Component	log Koc	Remark
Succinic acid	0.800	

# 13 Disposal considerations

# | Disposal considerations

Waste chemicals	Before disposal should refer to the relevant national and local laws and	
	regulation. Recommend the use of incineration disposal.	
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot	
	and ignition source of fire. Return to supplier for recycling if possible.	
Disposal recommendations	Refer to section waste chemicals and contaminated packaging.	

# 14 Transport information

#### Label and Mark

Transporting Label Not applicable

#### | IMDG-CODE

IMDG-CODE NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

#### IATA-DGR

IATA-DGR NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

#### UN-ADR

UN-ADR NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

### Transport in bulk according to IMO instruments

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Available

◆ Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Not Available

Transport in bulk in accordance with the IGC Code

Not Available

### Others

**Precautions for transport** 

Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before transport, should be preceded by checking whether container integrity, sealing. The transport unit must be placarded and marked in accordance with relevant transporting requirements.

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# 15 Regulatory information

### International chemical inventory

Component	Α	В	С	D	E	F	G	Н	I	J	K	L	M
Succinic acid	√	√	√	√	√	√	√	√	√	<b>√</b>	√	√	<b>√</b>

- [A] China Inventory of Existing Chemical Substances(IECSC)
- [B] European Inventory of Existing Commercial Chemical Substances(EC inventory)
- [C] United States Toxic Substances Control Act Inventory(TSCA)
- [D] Canadian Domestic Substances List(DSL)
- [E] New Zealand Inventory of Chemicals(NZIoC)
- [F] Philippines Inventory of Chemicals and Chemical Substances(PICCS)
- [G] Korea Existing Chemicals Inventory(KECL)
- [H] Australian. Inventory of Industrial Chemical (AIICS)
- [1] Japan Inventory of Existing & New Chemical Substances(ENCS)
- [J] Thailand Existing Chemicals Inventory(TECI)
- [K] Mexico National Inventory of Chemical Substances (INSQ)
- [L] Russia Inventory of Existing Substances (DRAFT)
- [M] Inventory of Existing Chemical Substances in Taiwan, China (TCSI)

#### List of Chemical Substances under International Conventions

Component A		В	С	
Succinic acid	×	×	×	

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- [A] The Montreal Protocol on Substances that Deplete the Ozone Layer
- [B] Stockholm Convention on Persistent Organic Pollutants (POPs)
- [C] Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade

## US chemical inventory

Component	Α	В	С	D	E	F	G	Н
Succinic acid	×	×	×	×	×	×	×	×

- [A] US Clean Air Act (CAA)- Section 112, Hazardous Air Pollutants
- [B] US SARA 302- Extremely Hazardous Substance List
- [C] US CERCLA- Hazardous Substances List
- [D] US Massachusetts Right-to-Know Substance List
- [E] US New Jersey Right to Know Hazardous Substance List
- [F] US Pennsylvania Right to Know Hazardous Substance List
- [G] US New York City Right-to-Know Hazardous Substance List
- [H] US California Proposition 65 List

#### Note:

- " $\sqrt{}$ " Indicates that the substance included in the regulations.
- "x" No data or not included in the regulations.

# 16 Other information

## Information on revision

Creation Date	2025/11/11
Revision Date	-
Reason for revision	-

### Reference

- [1] IPCS: The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home.
- [2] IARC, website: http://www.iarc.fr/.
- [3] OECD: The Global Portal to Information on Chemical Substances, website: https://www.echemportal.org/echemportal/.
- [4] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple.
- [5] NLM: ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp.
- [6] EPA: Integrated Risk Information System, website: http://cfpub.epa.gov/iris/.
- $[7] \qquad \text{U.S. Department of Transportation: ERG, website: http://www.phmsa.dot.gov/hazmat/library/erg.} \\$
- [8] Germany GESTIS-database on hazard substance, website: http://gestis-en.itrust.de/.

### Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG- CODE	International Maritime Dangerous Goods CODE
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC <sub>50</sub>	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD <sub>50</sub>	Lethal Dose 50%	NTP	National Toxicology Program
EC <sub>50</sub>	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
$EC_X$	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
Pow	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction

BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment
ED	Endocrine disruptor	HCS	Hazard Communication Standard

## Disclaimer

This Safety Data Sheet (SDS) was prepared according to OSHA HCS-2024. The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

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