



TOKYO CHEMICAL INDUSTRY CO., LTD.

Succinic Acid

Revision 2
number:

Revision date: 03/05/2023

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SAFETY DATA SHEET

1. IDENTIFICATION

Product name: Succinic Acid
Product code: S0100
Company: TOKYO CHEMICAL INDUSTRY CO., LTD.
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Revision number: 2

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

| | |
|--|----------------|
| PHYSICAL HAZARDS | Not classified |
| HEALTH HAZARDS | |
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |
| ENVIRONMENTAL HAZARDS | Not classified |

Label elements

Pictograms or hazard symbols



Signal word

Warning

Hazard statements

Causes skin irritation

Causes serious eye irritation

Precautionary statements

[Prevention]

Wash hands and face thoroughly after handling.

Wear protective gloves, eye protection.

[Response]

IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance
Components: Succinic Acid
Percent: >99.0%(T)
CAS RN: 110-15-6
Synonyms: Butanedioic Acid
Chemical Formula: C₄H₆O₄
Notice Through Official Gazettes Reference Number
ENCS: (2)-846
ISHL: Official announcement chemistry substance.

4. FIRST-AID MEASURES

- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- Skin contact:** Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
- Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Ingestion:** Get medical advice/attention if you feel unwell. Rinse mouth.
- Protection of first-aiders:** A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media:** Dry chemical, foam, water spray, carbon dioxide.
- Precautions for firefighters:** Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.
- Special protective equipment for firefighters:** When extinguishing fire, be sure to wear personal protective equipment

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
- Environmental precautions:** Prevent product from entering drains.
- Methods and materials for containment and cleaning up:** Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

- Technical measures:** Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling.
Use a local exhaust if dust or aerosol will be generated.
- Advice on safe handling:** Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

- Storage conditions:** Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents.
- Packaging material:** Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Engineering controls:** Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.
- Control parameters:** Not set up
- Personal protective equipment**
- Respiratory protection:** Dust respirator. Follow local and national regulations.
- Hand protection:** Protective gloves.
- Eye protection:** Safety glasses. A face-shield, if the situation requires.
- Skin and body protection:** Protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|--|
| Physical state (20°C): | Solid |
| Form: | Crystal - Powder |
| Colour: | White |
| Odour: | Odorless |
| Melting point/freezing point: | 187°C |
| Boiling point/range: | 235°C |
| Flammability(solid, gas): | No data available |
| Flash point: | No data available |
| Autoignition temperature: | No data available |
| Flammability or explosive limits: | |
| Lower: | No data available |
| Upper: | No data available |
| pH: | 2.7 (0.1mol H ₂ O soln.) |
| Kinematic viscosity: | No data available |
| Vapour pressure: | 2.55 x 10 ⁻⁵ Pa/25°C |
| Solubility(ies): | |
| [Water] | Soluble (8.3g/100mL, 25°C) |
| [Other solvents] | |
| Very soluble: | Methanol |
| Soluble: | Acetone, Ethanol, Glycerol |
| Slightly soluble: | Ether |
| Insoluble: | Benzene, Carbon tetrachloride, Petroleum ether, Carbon disulfide |
| Log Pow: | -0.59 |
| Relative density: | No data available |
| Vapour density: | No data available |
| Particle characteristics: | No data available |

10. STABILITY AND REACTIVITY

| | |
|--|--|
| Reactivity: | No data available |
| Chemical stability: | Stable under proper conditions. |
| Possibility of hazardous reactions: | No special reactivity has been reported. |
| Conditions to avoid: | No data available |
| Incompatible materials: | Oxidizing agents, Bases, Reducing agents |
| Hazardous decomposition products: | Carbon dioxide, Carbon monoxide |

11. TOXICOLOGICAL INFORMATION

| | |
|---------------------------------------|---|
| Acute Toxicity: | ipr-mus LD50:2702 mg/kg ipr-rat TDLo:100 mg/kg ivn-mus LD50:1400 mg/kg orl-rat LD50:2260 mg/kg |
| Skin corrosion/irritation: | No data available |
| Serious eye damage/irritation: | eye-rbt 750 ug SEV |
| Germ cell mutagenicity: | dni-hmn-fbr 20 mmol/L |
| Carcinogenicity: | |
| IARC = | No data available |
| NTP = | No data available |
| Reproductive toxicity: | No data available |
| STOT-single exposure: | No data available |
| STOT-repeated exposure: | No data available |
| Aspiration hazard: | No data available |
| RTECS Number: | WM4900000 |

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: No data available

Crustacea: No data available

Algae: No data available

Persistence / degradability: 78% (by BOD) , 100% (by HPLC) , 99% (by TOC)

*The substance was determined as "Ready biodegradability" under the Chemical Substances Control Law.

Bioaccumulative potential(BCF): 0.21

Mobility in soil

Log Pow: -0.59

Soil adsorption (Koc): 11

Henry's Law (PaM³/mol): 3.6 x 10⁻⁸

Other adverse effects: No data available

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

UN-No: Not listed

Hazards Class: Does not correspond to the classification standard of the United Nations

Specific precautionary transport measures and conditions:

15. JAPANESE REGULATORY INFORMATION

ENCS: Substance excepted from notification

16. OTHER INFORMATION

The reference company name of written contents

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