## SECTION 1: Identification

### 1.1. Identification
- **Product form**: Substance
- **Substance name**: Sodium Succinate Anhydrous
- **CAS-No.**: 150-90-3
- **Formula**: $\text{C}_4\text{H}_4\text{Na}_2\text{O}_4$

### 1.2. Recommended use and restrictions on use
- **Use of the substance/mixture**: Laboratory Reagent

### 1.3. Supplier
**Manufacturer**
Jost Chemical Co.
8150 Lackland Rd.
Saint Louis, Missouri 63114
T 314-428-4300 - F 314-428-4366
sds@jostchemical.com - www.jostchemical.com

### 1.4. Emergency telephone number
- **Emergency number**: For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident
  - Call CHEMTREC Day or Night
    - United States and Canada: 1-800-424-9300 / +1 703-527-3887
    - Global: +1 703-741-5970

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture
**GHS-US classification**
Not classified

### 2.2. GHS Label elements, including precautionary statements
**GHS-US labeling**
No labeling applicable

### 2.3. Other hazards which do not result in classification
No additional information available

### 2.4. Unknown acute toxicity (GHS US)
Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances
- **Substance type**: Mono-constituent
- **Name**: Sodium Succinate Anhydrous (Main constituent)

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Succinate Anhydrous</td>
<td>(CAS-No.) 150-90-3</td>
<td>100</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements: see section 16

### 3.2. Mixtures
Not applicable

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures
**Sodium Succinate Anhydrous**

**Safety Data Sheet**

**First-aid measures after inhalation**: Remove person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. Call a poison center/doctor/physician if you feel unwell.

**First-aid measures after skin contact**: Wash immediately with lots of water (15 minutes)/shower. Soap may be used. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

**First-aid measures after eye contact**: Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist. Do not apply neutralizing agents. 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.

**First-aid measures after ingestion**: Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Give milk to drink. Ingestion of large quantities: immediately to hospital. Call Poison Information Centre (www.big.be/antigif.htm). Call a poison center/doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

**Potential Adverse human health effects and symptoms**: Causes skin irritation. May cause respiratory irritation. Causes serious eye irritation.

**Symptoms/effects after inhalation**: AFTER INHALATION OF DUST: Irritation of the respiratory tract. Irritation of the nasal mucous membranes. May cause respiratory irritation.

**Symptoms/effects after skin contact**: Tingling/irritation of the skin. Irritation.

**Symptoms/effects after eye contact**: Irritation of the eye tissue. Eye irritation.


### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

**SECTION 5: Fire-fighting measures**

**5.1. Suitable (and unsuitable) extinguishing media**


**Unsuitable extinguishing media**: Quick-acting BC powder extinguisher. Quick-acting CO2 extinguisher.

**5.2. Specific hazards arising from the chemical**

**Fire hazard**: No data available on direct fire hazard. No data available on indirect fire hazard.

**Explosion hazard**: No data available on direct explosion hazard. No data available on indirect explosion hazard.

**Reactivity**: The product is non-reactive under normal conditions of use, storage and transport.

**SECTION 6: Accidental release measures**

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

**General measures**: Avoid breathing dust, mist or spray.

**6.1.1. For non-emergency personnel**


**Emergency procedures**: Ventilate spillage area. Mark the danger area. Prevent dust cloud formation, e.g. by wetting. Wash contaminated clothes. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

**Measures in case of dust release**: In case of dust production: keep upwind. Dust production: have neighborhood close doors and windows.

**6.1.2. For emergency responders**

**Protective equipment**: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

**6.2. Environmental precautions**

Avoid release to the environment.
6.3. Methods and material for containment and cleaning up

**For containment:**
Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.

**Methods for cleaning up:**
Mechanically recover the product. Prevent dust cloud formation. Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

**Other information:**
Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

**SECTION 7: Handling and storage**

7.1. Precautions for safe handling

**Precautions for safe handling:**
Avoid raising dust. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Wear personal protective equipment.

**Hygiene measures:**
Reduce/avoid exposure and/or contact. Keep container tightly closed. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:**
Store in a clean, dry warehouse in the original unopened containers. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

**Information on mixed storage:**
KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids.

**Storage area:**
Store in a cool area. Store in a dry area. Meet the legal requirements.

**Special rules on packaging:**
SPECIAL REQUIREMENTS: closing. watertight. dry. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

**Packaging materials:**
SUITABLE MATERIAL: plastics.

**SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

**Appropriate engineering controls:**
Ensure good ventilation of the work station.

**Environmental exposure controls:**
Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

**Personal protective equipment:**

**Materials for protective clothing:**
Wear suitable protective clothing, gloves and eye/face protection

**Hand protection:**
Gloves

**Eye protection:**
Face shield. In case of dust production: protective goggles. Safety glasses

**Skin and body protection:**
Protective clothing. In case of dust production: head/neck protection. In case of dust production: dustproof clothing

**Respiratory protection:**
Dust production: dust mask with filter type P2

**Personal protective equipment symbol(s):**
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Powder.</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7 - 9</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>162.05 g/mol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water. Water: 35 g/100ml</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

Other properties: Hygroscopic.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Unstable on exposure to moisture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.
# Sodium Succinate Anhydrous

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>pH</td>
<td>7 - 9</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>pH</td>
<td>7 - 9</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity – single exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity – repeated exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Likely routes of exposure</td>
<td>Skin and eye contact. Inhalation. Ingestion.</td>
</tr>
<tr>
<td>Potential Adverse human health effects and symptoms</td>
<td>Causes skin irritation. May cause respiratory irritation. Causes serious eye irritation.</td>
</tr>
<tr>
<td>Symptoms/effects after inhalation</td>
<td>AFTER INHALATION OF DUST: Irritation of the respiratory tract. Irritation of the nasal mucous membranes. May cause respiratory irritation.</td>
</tr>
<tr>
<td>Symptoms/effects after skin contact</td>
<td>Tingling/irritation of the skin. Irritation.</td>
</tr>
<tr>
<td>Symptoms/effects after eye contact</td>
<td>Irritation of the eye tissue. Eye irritation.</td>
</tr>
</tbody>
</table>

## SECTION 12: Ecological information

### 12.1. Toxicity

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecology - general</td>
<td>Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.</td>
</tr>
<tr>
<td>Ecology - water</td>
<td>Mild water pollutant (surface water). No data available on ecotoxicity.</td>
</tr>
</tbody>
</table>

### 12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Sodium Succinate Anhydrous (150-90-3)</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodegradability in water</td>
<td>no data available.</td>
</tr>
</tbody>
</table>

### 12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Sodium Succinate Anhydrous (150-90-3)</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>No bioaccumulation data available.</td>
<td></td>
</tr>
</tbody>
</table>

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

**Waste treatment methods**: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sodium Succinate Anhydrous
Safety Data Sheet

Product/Packaging disposal recommendations: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery. Dissolve or mix with a combustible solvent.


SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated

Transportation of Dangerous Goods
Proper Shipping Name (Transportation of Dangerous Goods): Not regulated for transport

Transport by sea
Proper Shipping Name (IMDG): Not regulated for transport

Air transport
Proper Shipping Name (IATA): Not regulated for transport

SECTION 15: Regulatory information

15.1. US Federal regulations

Sodium Succinate Anhydrous (150-90-3)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes
Immediate (acute) health hazard

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

| Sodium Succinate Anhydrous | CAS-No. 150-90-3 | 100% |

15.2. International regulations

CANADA

Sodium Succinate Anhydrous (150-90-3)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Sodium Succinate Anhydrous (150-90-3)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Sodium Succinate Anhydrous (150-90-3)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations
Sodium Succinate Anhydrous
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 06/12/2018

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.

Hazard Rating
Health : 2 Moderate Hazard - Temporary or minor injury may occur
Flammability : 0 Minimal Hazard - Materials that will not burn
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.