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

1.1 **Product identifier**

**Trade name** Sebacic acid

**Stock number:** A14158, L05051

**CAS Number:** 111-20-6

**EC number:** 203-845-5

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

**Identified use:** SU24 Scientific research and development

1.3 **Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:** Thermo Fisher (Kandel) GmbH

Zeppelinstr. 7b

76185 Karlsruhe / Germany

Tel: +49 (0) 721 84007 280

Fax: +49 (0) 721 84007 300

Email: tech@alfa.com

www.alfa.com

**Informing department:** Product safety Tel +409 (0) 7275 988687-0

1.4 **Emergency telephone number:**

Carechem 24: +44 (0) 1235 239 670 (Multi-language emergency number)

Poison Information Center Mainz

www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240

**SECTION 2: Hazards identification**

2.1 **Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

![GHS07](image)

**Skin Irrit. 2 H315** Causes skin irritation.

**Eye Irrit. 2 H319** Causes serious eye irritation.

**STOT SE 3 H335** May cause respiratory irritation.

**Other hazards that do not result in classification** No information known.

2.2 **Label elements**

**Labelling according to Regulation (EC) No 1272/2008** The substance is classified and labelled according to the CLP regulation.

**Hazard pictograms**

![GHS07](image)

**Signal word** Warning

**Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

**Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protection clothing/eye protection/face protection.

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

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P362 Take off contaminated clothing and wash before reuse.

P332+P313 Specific treatment (see on this label).

P332 Specific treatment (see the first aid instructions).

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 **Other hazards**

**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**SECTION 3: Composition/Information on ingredients**

3.1 **Substances**

<table>
<thead>
<tr>
<th>CAS# Designation:</th>
<th>Identification number(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-20-6 Sebacic acid</td>
<td>EC number: 203-845-5</td>
</tr>
</tbody>
</table>

**SECTION 4: First aid measures**

4.1 **Description of first aid measures**

**After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

**Seek immediate medical advice.**

**After skin contact**

Instantly wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

**After eye contact**

Rinse opened eye for several minutes under running water. Then consult doctor.

**After swallowing**

Seek medical treatment.

**Causes skin irritation.**

**Causes serious eye irritation.**

May cause respiratory irritation.

4.2 **Most important symptoms and effects, both acute and delayed**

4.3 **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**SECTION 5: Firefighting measures**

5.1 **Extinguishing media**

**Suitable extinguishing agents** CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
Trade name **Sebacic acid**

### SECTION 6: Accidental release measures

**5.2 Special hazards arising from the substance or mixture**
If this product is involved in a fire, the following can be released:
- Carbon monoxide
- Carbon dioxide

**5.3 Advice for firefighters**
Protective equipment:
- Wear self-contained breathing apparatus.
- Wear full protective suit.

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.

**6.2 Environmental precautions:** Do not allow material to be released to the environment without proper governmental permits.

**6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.

**Prevention of secondary hazards:**
No special measures required.

**6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

### SECTION 7: Handling and storage

**7.1 Precautions for safe handling**
Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.

**Information about protection against explosions and fires:**
No information known.

**7.2 Conditions for safe storage, including any incompatibilities**
**Storage Requirements to be met by storerooms and containers:**
No special requirements.

**Information about storage in one common storage facility:**
Store away from oxidising agents.
Further information about storage conditions:
- Keep container tightly sealed.
- Store in cool, dry conditions in well sealed containers.

**7.3 Specific end use(s)**
No further relevant information available.

### SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**
**Components with critical values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Additional information:**
- No data

**8.2 Exposure controls**
**Personal protective equipment**
**General protective and hygienic measures**
The usual precautionary measures should be adhered to in handling the chemicals.

**Breathing equipment:**
Use breathing protection with high concentrations. **Recommended filter device for short term use:** Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.

**Protection of hands:**
Check protective gloves prior to each use for their proper condition.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Material of gloves**
- Nitrile rubber, NBR

**Penetration time of glove material (in minutes)**
- 480

**Glove thickness**
- 0.11 mm

**Eye protection:**
- Safety glasses

### SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

**General Information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form</strong></td>
<td>Powder</td>
</tr>
<tr>
<td><strong>Odour threshold</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH-value</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Melting point/Melting range</strong></td>
<td>131-134 °C</td>
</tr>
<tr>
<td><strong>Boiling point/Boiling range</strong></td>
<td>295 °C (100mm)</td>
</tr>
<tr>
<td><strong>Sublimation temperature / start</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>220 °C</td>
</tr>
<tr>
<td><strong>Inflammability (solid, gaseous)</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Ignition temperature</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Self-inflammability</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Danger of explosion:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Critical values for explosion:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Steam pressure:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Density at 20 °C</strong></td>
<td>1.27 g/cm³</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

(Contd. on page 3)
Solubility in / Miscibility with
Water: Not determined
Partition coefficient (n-octanol/water): Not determined.
Viscosity:
  dynamic: Not applicable.
  kinematic: Not applicable.
9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity
10.1 Reactivity No information known.
10.2 Chemical stability Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions Reacts with strong oxidising agents
10.4 Conditions to avoid No further relevant information available.
10.5 Incompatible materials: Oxidising agents
10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information
11.1 Information on toxicological effects
Acute toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in this product.
LD/LC50 values that are relevant for classification: No data
Skin irritation or corrosion: Causes skin irritation.
Eye irritation or corrosion: Causes serious eye irritation.
Sensitization: No sensitizing effect known.
Germ cell mutagenicity: No effects known.
Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Reproductive toxicity: No effects known.
Specific target organ system toxicity - repeated exposure: No effects known.
Specific target organ system toxicity - single exposure: May cause respiratory irritation.
Aspiration hazard: No effects known.
Subacute to chronic toxicity: No effects known.
Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12: Ecological information
12.1 Toxicity Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumulative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.
Additional ecological information: General notes: Do not allow material to be released to the environment without proper governmental permits. Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment.
12.5 Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.
12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations
13.1 Waste treatment methods Recommendation Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information
UN-Number Not applicable
ADR, ADN, IMDG, IATA Not applicable
14.2 UN proper shipping name ADR, ADN, IMDG, IATA Not applicable
14.3 Transport hazard class(es) ADR, ADN, IMDG, IATA Class Not applicable
Packing group ADR, IMDG, IATA Not applicable
14.5 Environmental hazards: Not applicable.
14.6 Special precautions for user Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
UN “Model Regulation”: -

SECTION 15: Regulatory information
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Australian Inventory of Chemical Substances Substance is listed. Standard for the Uniform Scheduling of Medicines and Poisons Substance is not listed.
National regulations Information about limitation of use: Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals.
Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
Other regulations, limitations and prohibitive regulations ELINCS (European List of Notified Chemical Substances) Substance is not listed. Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.
The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative

ACGIH: American Conference of Governmental Industrial Hygienists (USA)

OSHA: Occupational Safety and Health Administration (USA)

NTP: National Toxicology Program (USA)

IARC: International Agency for Research on Cancer

EPA: Environmental Protection Agency (USA)

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3