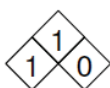


## 1. Identification

- **Product identifier**
- **Product name:** InstaMorph® Moldable Plastic
- **Product identifier**  
2-oxepanone, homopolymer  
Cas No.: 24980-41-4  
EC No: polymer
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture**  
Arts & Crafts  
Footwear industry  
Plastic film for packaging  
Pharmaceuticals  
Automotive industry
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Sorfeo, Inc.  
1713 Oak Ln  
McLean, VA 22101  
United States  
  
www.instamorph.com
- **Information department:** info@instamorph.com
- **Emergency telephone number:**  
Emergencies (USA):  
1-800-424-9300 (CHEXMTREC)  
Emergencies (Int.):  
+46 8 337043 (Emergency Response Center, Sweden)

## 2. Hazard(s) identification

- **Classification of the substance or mixture**  
The substance is not classified according to the Globally Harmonized System (GHS).
- **Label elements**
- **Hazard pictograms** Not applicable
- **Signal word** Not applicable
- **Hazard statements** Not applicable
- **Precautionary statements** Not applicable
- **Hazard description:** No special hazards are associated with this product.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1  
Fire = 1  
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**

|            |   |                |
|------------|---|----------------|
| HEALTH     | 1 | Health = 1     |
| FIRE       | 1 | Fire = 1       |
| REACTIVITY | 0 | Reactivity = 0 |

- **Other hazards**

Caution - substance not yet fully tested.

Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.

- **Results of PBT and vPvB assessment**

- **PBT:** No.

- **vPvB:** No.

### 3. Composition/information on ingredients

- **Chemical characterization: Substances** Yes.

- **Chemical components:**

|            |                          |      |
|------------|--------------------------|------|
| 24980-41-4 | 2-oxepanone, homopolymer | ≥99% |
|------------|--------------------------|------|

### 4. First-aid measures

- **Description of first aid measures**

- **After inhalation:** First aid measures not required, but get fresh air for personal comfort.

- **After skin contact:**

First aid measures not required, but wash exposed skin with soap and water for hygienic reasons. After contact with the molten/hot product, cool rapidly with cold water.

- **After eye contact:** Rinse opened eye for several minutes under running water.

- **After swallowing:**

Rinse mouth with water.

If a large quantity has been ingested or you feel unwell, get medical advice/attention.

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

No further relevant information available.

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

No further relevant information available.

### 5. Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

Water

Foam

Carbon dioxide

Fire-extinguishing powder

- **For safety reasons unsuitable extinguishing agents:** Water with full jet

- **Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Carbon monoxide (CO)  
Monomer (2-Oxepanone, Hexan-6-olide, CAS 502-44-3)

- **Advice for firefighters**
- **Protective equipment:**  
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear safety glasses, gloves, protective clothing and rubber boots for hygienic reasons.
- **Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Clean the affected area carefully; suitable cleaners are:  
water
- **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 disposal information.

## 7. Handling and storage

- **Precautions for safe handling**  
Wear personal protective equipment according to section 8 if risk of exposure.  
Keep away from heat and direct sunlight.
- **Information about protection against explosions and fires:** Not applicable
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

## 8. Exposure controls/personal protection

- **Control parameters**
- **Components with limit 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:**
- **OSHA-Ca (Occupational Safety & Health Administration)**  
Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

- **Breathing equipment:**

Not necessary if room is well-ventilated.

Wear respiratory device with filter in case of insufficient ventilation.

Filter N95

- **Protection of hands:**

Protective gloves not really required. However, we recommend using protective gloves made of rubber.

- **Material of gloves**

PVC gloves

Chloroprene rubber, CR

Butyl rubber, BR

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.

- **Penetration time of glove material**

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Safety glasses

- **Body protection:** Normal work clothes for the chemical industry (long legs and sleeves).

- **Limitation and supervision of exposure into the environment** Not applicable

## 9. Physical and chemical properties

|  |
|--|
| <ul style="list-style-type: none"> <li>• <b>Information on basic physical and chemical properties</b></li> <li>• <b>General Information</b></li> <li>• <b>Appearance:</b> <ul style="list-style-type: none"> <li>Form: Granulate</li> <li>Color: White</li> </ul> </li> <li>• <b>Odor:</b> Odorless</li> </ul> |
| <ul style="list-style-type: none"> <li>• <b>Change in condition</b> <ul style="list-style-type: none"> <li>Melting point/Melting range: 58-60 °C (136-140 °F)</li> <li>Boiling point/Boiling range: Not determined</li> </ul> </li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Flash point:</b> 275 °C (527 °F)</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Flammability (solid, gaseous):</b> Not determined</li> </ul>   |
| <ul style="list-style-type: none"> <li>• <b>Ignition temperature:</b></li> </ul>   |
| <ul style="list-style-type: none"> <li>• <b>Decomposition temperature:</b> approx 200 °C (approx 392 °F)</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Danger of explosion:</b> Not explosive.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• <b>Explosion limits:</b> Not applicable</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Oxidizing properties:</b> Not oxidizing</li> </ul>   |

|   |   |
|---|---|
| • <b>Vapor pressure:</b>                            | Not determined                            |
| • <b>Density at 60 °C (140 °F):</b>                 | 1.1 g/cm <sup>3</sup> (9.18 lbs/gal)      |
| • <b>Solubility in / Miscibility with Water:</b>    | Insoluble                                 |
| • <b>Segregation coefficient (n-octanol/water):</b> | Not determined                            |
| • <b>Viscosity:</b>                                 |   |
| • <b>Dynamic:</b>                                   | Not applicable                            |
| • <b>Other Information</b>                          | No further relevant information available |

## 10. Stability and reactivity

- **Reactivity**  
There exists no specific test data for this product. For further information, see the subsequent subsections of this chapter.
- **Chemical stability** The product is stable at normal conditions.
- **Possibility of hazardous reactions** **No dangerous reactions known.**
- **Conditions to avoid** Heat
- **Incompatible materials:**  
Avoid contact with acids.  
Avoid contact with bases.
- **Hazardous decomposition products:**  
Possible decomposition and release of monomer at temperatures above 200°C (392°F).

## 11. Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values:**  
No information available.  
The polymer is not bioavailable because of its molecular size.
- **Primary irritant effect:**
- **on the skin:** No information available.
- **on the eye:** No information available.
- **Sensitization:** No sensitizing effects known.
- **Carcinogenicity:** No information available.
- **Mutagenicity:** No information available.
- **Reproductive toxicity:** No information available.
- **Remark:**  
Caution - substance not yet fully tested.  
Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.

## 12. Ecological information

- **Toxicity**
- **Aquatic toxicity:**

No information available.

The polymer is not bioavailable because of its molecular size.

- **Persistence and degradability:** No information available.
- **Other information:** The product is readily biodegradable.
- **Bioaccumulative potential:** No information available.
- **Mobility in soil:** No information available.
- **Results of PBT and vPvB assessment**
- **PBT:** No.
- **vPvB:** No.
- **Other adverse effects:** No further relevant information available.
- **Remark:**

Caution - substance not yet fully tested.

Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.

### 13. Disposal considerations

- **Waste treatment methods:** The product is not classified as hazardous waste.
- **Uncleaned packagings:**  
Contaminated packaging materials must be disposed of in the same manner as the product.
- **Recommendation:** Disposal must be made according to official regulations.

### 14. Transport information

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• <b>UN Number</b></li> <li>• <b>DOT, ADR, ADN, IMDG, IATA</b></li> </ul>  | -  |
| <ul style="list-style-type: none"> <li>• <b>Proper shipping name (Technical Name)</b></li> <li>• <b>DOT, ADR, ADN, IMDG, IATA</b></li> </ul>              | -  |
| <ul style="list-style-type: none"> <li>• <b>Transport hazard class(es)</b></li> <li>• <b>DOT, ADR, ADN, IMDG, IATA</b></li> <li>• <b>Class</b></li> </ul> | -  |
| <ul style="list-style-type: none"> <li>• <b>Packing group</b></li> <li>• <b>DOT, ADR, IMDG, IATA</b></li> </ul>   | -  |
| <ul style="list-style-type: none"> <li>• <b>Environmental hazards:</b></li> </ul>   | Not applicable.                                      |
| <ul style="list-style-type: none"> <li>• <b>Special precautions for user:</b></li> </ul>  | Not applicable.                                      |
| <ul style="list-style-type: none"> <li>• <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b></li> </ul>                        | Not applicable.                                      |
| <ul style="list-style-type: none"> <li>• <b>Transport/Additional information:</b></li> </ul>  | Not dangerous according to the above specifications. |

### 15. Regulatory Information

|   |
|---|
| <ul style="list-style-type: none"> <li>• <b>Section 355 (extremely hazardous substances):</b><br/>Substance is not listed.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• <b>Section 313 (Specific toxic chemical listings):</b><br/>Substance is not listed.</li> </ul> |
| <ul style="list-style-type: none"> <li>• <b>Carcinogenic categories</b></li> </ul>  |

|   |
|---|
| <ul style="list-style-type: none"> <li>• <b>EPA (Environmental Protection Agency)</b><br/>Substance is not listed.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• <b>IARC (International Agency for Research on Cancer)</b><br/>Substance is not listed.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>NTP (National Toxicology Program)</b><br/>Substance is not listed.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• <b>Inventory status:</b></li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Australian Inventory of Chemical Substances (AICS)</b><br/>Substance is not listed.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Canadian Domestic Substance List (DSL)</b><br/>Substance is not listed.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Canadian Non Domestic Substance List (NDSL)</b><br/>Substance is not listed.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• <b>Chinese Chemical Inventory of Existing Chemical Substances (CIECS)</b><br/>Substance is not listed.</li> </ul>                                      |
| <ul style="list-style-type: none"> <li>• <b>European EINECS/ELINCS Listing</b><br/>Exempt, polymer<br/>Substance is not listed.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Japan Existing and New chemical Substance List (ENCS)</b><br/>Substance is not listed.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• <b>Korea Existing Chemical Inventory (KECI)</b><br/>Substance is listed.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b><br/>Substance is listed.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>TSCA listing</b><br/>Substance is listed.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Other regulations, limitations and prohibitive regulations Not applicable</b></li> <li>• <b>State of California, Proposition 65:</b></li> </ul>     |
| <ul style="list-style-type: none"> <li>• <b>Chemicals known to cause cancer:</b><br/>Substance is not listed.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Chemicals known to cause reproductive toxicity for females:</b><br/>Substance is not listed.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• <b>Chemicals known to cause reproductive toxicity for males:</b><br/>Substance is not listed.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• <b>Chemicals known to cause developmental toxicity:</b><br/>Substance is not listed.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Additional information:</b></li> <li>• TSCA IUR/CDR, Chemicals Exempt from Update Reporting [flagged XU on TSCA Inventory] (August 2014)</li> </ul> |

## 16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Sorfeo, Inc.