# Safety Data Sheet (SDS)

**Revision Number:** 3.0  
**Last updated:** 14 November 2018

## 1. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>OPA [o - Phthaldialdehyde] <em>UltraPure Grade</em></th>
</tr>
</thead>
</table>
| Manufacturer/Supplier: | AnaSpec, Inc.  
www.anaspec.com  
34801 Campus Drive  
Fremont, CA 94555  
Tel: 510-791-9560  
Fax: 510-791-9572  
Email: service@anaspec.com |
| | Kaneka Eurogentec SA,  
Rue du Bois Saint Jean 5 4102 Seraing Belgium  
Tel. +32-4-3727400  
Fax. +32-4-3727500  
E-mail info@eurogentec.com |
| | Kaneka Eurogentec Helpdesk  
Tel. +32-4-3727665 |
| Catalog Number | AS-83012 |
| Relevant identified uses of the substance/preparation and uses advised against | For laboratory use only. |
| Emergency information | Please contact the regional Eurogentec representation in your country or Kaneka Eurogentec S.A. directly (from 8 am to 6 pm) |

## 2. Hazards Identification

**Emergency Overview:** We do recommend handling all chemicals with caution. Use proper protective equipment (PPE) when handling chemicals.

**GHS Hazard Classification:**
- Acute toxicity, Oral (Category 3), H301
- Skin corrosion (Category 1B), H314
- Serious eye damage (Category 1), H318
- Skin sensitization (Category 1), H317
- Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

**Pictograms:**

- **GHS06**: Toxic
- **GHS05**: Corrosive
- **GHS09**: Environmental hazard

**GHS Signal Words:** Danger

**GHS Hazard Statements:**
- **H301**: Toxic if swallowed
- **H314**: Causes severe skin burns and eye damage
- **H317**: May cause an allergic skin reaction
- **H410**: Very toxic to aquatic life with long lasting effects

**GHS Precautionary Statements:**
- **P260**: Do not breathe dust or mist
- **P264**: Wash skin thoroughly after handling
- **P270**: Do not eat, drink, or smoke when using this product
- **P272**: Contaminated work clothing should not be allowed out of the workplace
- **P273**: Avoid release to the environment
- **P280**: Wear protection gloves, protective clothing, eye protection, face protection
- **P301 + P310**: IF SWALLOWED: Immediately call a poison center or doctor/physician
- **P301 + P330 + P331**: IF SWALLOWED: rinse mouth. Do NOT induce vomiting
- **P303 + P361 + P353**: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.
- **P304 + P340**: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- **P305 + P351 + P338**: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **P310**: Immediately call a POISON CENTER or doctor/physician.
- **P333 + P313**: If skin irritation or rash occurs: Get medical advice/attention.
- **P363**: Wash contaminated clothing before resue.
- **P391**: Collect spillage.
- **P405**: Store locked up.
- **P501**: Dispose of contents/ container to an approved waste disposal plant.

**Potential Health Effects for:**

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

**Ingestion:** If swallowed, wash out mouth with water provided person is conscious. Call a physician.

**Skin:** In case of contact, immediately wash skin with soap and copious amount of water.
**Eyes:** In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

**Chronic Exposures:** No information available. We recommend limiting prolonged exposure.

**Target Organs:** No information available

**HMIS Classification**

- **Health hazard:** Toxic, irritant
- **Chronic Health Hazard:** 0
- **Flammability:** 0
- **Physical hazards:** 0

**NFPA Rating**

- **Health hazard:** 0
- **Fire:** 0
- **Reactivity Hazard:** 0

### 3. Composition

**Ingredients/Components:**

**Chemical Name:** OPA

*[O-Phthalaldehyde] *UltraPure Grade*

Molecular formula: C₈H₆O₂
Molecular weight: 134.13
CAS-No  643-79-8
EC-No    211-402-2

### 4. First Aid Measures

**Inhalation:**
If dust is inhaled, remove from contaminated area. Encourage patient to blow nose to ensure clear passage of breathing. If irritation or discomfort persists seek medical attention.

**Ingestion:**
If swallowed do **NOT** induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.
### 5. Fire Fighting Measures

**Extinguishing media:**
- Water spray or fog.
- Alcohol resistant foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide

**Special firefighting procedures:**
- Alert Emergency Responders and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- **DO NOT** approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

**Unusual fire and explosions hazards:**
Emits toxic fumes under fire conditions

### 6. Accidental Release Measures

**Spill response**
- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Control personal contact by using protective equipment.
- Use dry clean up procedures and avoid generating dust.
- Place in a suitable, labeled container for waste disposal

**Containment**
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- **DO NOT** enter confined spaces until atmosphere has been checked.
- **DO NOT** allow material to contact humans, exposed food or food utensils.
- Avoid contact with incompatible materials.
- When handling, **DO NOT** eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Use good occupational work practice.
- Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.
source.
Do NOT cut, drill, grind or weld such containers

**PPE**
Use personal protective equipment

### 7. Handling and Storage

Store at -20 °C, dry desiccated and protected from light. Store away from oxidizing agent.

### 8. Exposure Controls / Personal Protection

| Engineering controls | Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction. Exhaust ventilation should be designed to prevent accumulation and re-circulation of particulates in the workplace. If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered. Such protection might consist of: (a): particle dust respirators, if necessary, combined with an absorption cartridge; (b): filter respirators with absorption cartridge or canister of the right type; (c): fresh-air hoods or masks Build-up of electrostatic charge on the dust particles, may be prevented by bonding and grounding. Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to efficiently remove the contaminant. |
|---|
| **PPE** | Use personal protective equipment |

### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>83 °C</td>
</tr>
<tr>
<td>Melting Point</td>
<td>54-56 °C</td>
</tr>
<tr>
<td>Flash Point</td>
<td>132 °C</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### 10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Thermal Decomposition</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerous Products of Decomposition</td>
<td>No data available</td>
</tr>
<tr>
<td>Dangerous Reactions</td>
<td>COx, NOx when burned</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Oxidizing agents, Amines, Strong bases</td>
</tr>
</tbody>
</table>
Keep container tightly closed in a dry well-ventilated place. Store in -20 °C, dry refrigerator.

11. Toxicological Information

<table>
<thead>
<tr>
<th>RTECS Number</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity</td>
<td>Acute Toxicity</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral, rat: 178 mg/kg</td>
</tr>
</tbody>
</table>

**Health Hazards**
Although ingestion is not thought to produce harmful effects, the material may still be damaging to the health of the individual following ingestion, especially where pre-existing organ (e.g. liver, kidney) damage is evident. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

**Potential Hazards**
Not available

**Carcinogenicity:**
No significant acute toxicological data identified

**OSHA Permissible Exposure Limit (PEL) Data**
N/A

**ACGIH Threshold Limit Values (TLV)**
N/A

**Reproductive Toxicity:**
No information available

12. Ecological Information

| Toxicity to fish | LC50 – Oncorhynchus mykiss (rainbow trout) – 0.072 mg/L – 96 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 – Daphnia magna (water flea) – 0.087 mg/L – 48 h |

13. Disposal Considerations

All waste must be handled in accordance with local, state and federal regulations. Legislation addressing waste disposal requirements may differ by country, state and/or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

14. Transport Information

| Hazard Class | 8 |
| Identification Number | 2923 |
| Packing Group | II |

**Proper Shipping Name (DOT)**
Corrosive solids, toxic, n.o.s (O-Phthalaldehyde)

15. Regulatory Information

*California Proposition 65: N/A*
*US TSCA (Toxic Substance Control Act): N/A*
*US CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act): N/A*
*US SARA Title III (Superfund Amendments and Reauthorization Act): N/A*
US Other: N/A

EC EINICS (European Inventory of Existing Commercial Chemical Substances) Number: N/A

EC Risk Statements: N/A

Other Country Regulations: N/A

16. Other Information

It is not intended for food, drug, household, agricultural or cosmetic use. A technically qualified individual experienced in handling potentially hazardous chemicals must supervise its use. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Users should make independent decisions regarding completeness of the information based on all sources available. AnaSpec shall not be held liable for any damage resulting from handling or from contact with the above product.