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

1.1 Product identifier
Trade name
CIDEX® OPA Solution

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses of the substance or mixture
High level disinfection

1.3 Details of the supplier of the safety data sheet
Address
Advanced Sterilization Products
33 Technology Drive
Irvine, CA 92618

Telephone no. (800) 755-5900

1.4 Emergency telephone number
(703) 527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification in accordance with Regulation (EC) No 1272/2008
Not a dangerous mixture according to GHS

2.2 Label elements
Labeling (EC) No 1272/2008:
Not a dangerous mixture according to GHS
Signal word

Hazard statements
EUH208 Contains ortho-phthalaldehyde. May produce an allergic reaction.
EUH210 Safety data sheet available on request.

Precautionary statements
P103 Read label before use

2.3 Other hazards
PBT assessment
The product is not considered to be a PBT.
vPvB assessment
The product is not considered to be a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances
Not applicable. The product is not a substance.

3.2 Mixtures
Chemical characterization
aqueous solution
Hazardous ingredients

<table>
<thead>
<tr>
<th>No</th>
<th>Substance name</th>
<th>CAS / EC / REACH no</th>
<th>Classification 67/548/EEC</th>
<th>Concentration % b.w.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>phthalaldehyde</td>
<td>643-79-8</td>
<td>&lt; 1,0</td>
<td>% b.w.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>211-402-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Acute toxicity, Oral (Category 3) H301
Skin corrosion (Category 1B) H314
Skin sensitization (Category 1) H317
Acute aquatic toxicity (Category 1) H400

Full text for all notes: pls. see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
In case of persisting adverse effects, consult a physician. Change contaminated, saturated clothing.

After inhalation
Remove affected person from the immediate area. Ensure supply of fresh air. In case of persisting adverse effects consult a physician.

After skin contact
Wash off immediately with soap and water.

After eye contact
Separate eyelids, wash the eyes thoroughly with water (15 min.). In case of irritation consult an ophthalmologist.

After ingestion
Summon a doctor immediately and show label or packaging. Rinse out mouth and give plenty of water or milk to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
Allergic symptoms

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
No data available.

Unsuitable extinguishing media
No data available.

5.2 Special hazards arising from the substance or mixture

None known

5.3 Advice for firefighters

Product itself does not burn. Adapt extinguisher and fire-fighting measures to fire in the environment. Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Refer to protective measures listed in sections 7 and 8.
For emergency responders
No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions
Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up
Pick up with absorbent material (e.g., sand, sawdust, general-purpose binder). When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections
Observe protective measures in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling
Avoid contact with skin and eyes. Open and handle container with care.

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Provide eye wash fountain in work area. Do not inhale vapours.

Advice on protection against fire and explosion
No special measures necessary.

7.2 Conditions for safe storage, including any incompatibilities
Technical measures and storage conditions
Keep container tightly closed, cool and dry. Protect from atmospheric moisture and water.

Recommended storage temperature
Value < 50 °C

Requirements for storage rooms and vessels
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Appropriate Material steel; stainless steel; aluminium; PVC; polyethylene

Advice on storage assembly
Do not store together with: Acids; Alcalies; Reducing agents; Oxidizing agents

7.3 Specific end use(s)
No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
No parameters available for monitoring.

8.2 Exposure controls
Appropriate engineering controls
No data available.

Personal protective equipment
Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection
Safety glasses with side protection shield (EN 166)

Hand protection
In case of intensive contact, wear protective gloves (EN 374). Check in any case suitability of protective glove for the specific workplace conditions (e.g. mechanical resistance, product compatibility, antistatic properties). The glove manufacturer’s instructions and information regarding storage, care and replacement.

Appropriate Material nitrile
Appropriate Material PVC
### Other
Normal chemical work clothing.

### Environmental exposure controls
No data available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form/Colour</strong></td>
<td>liquid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>light blue; clear</td>
<td></td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>mild characteristic “antiseptic” odour</td>
<td></td>
</tr>
<tr>
<td><strong>pH value</strong></td>
<td>7.2 - 7.8</td>
<td>neutral</td>
</tr>
<tr>
<td><strong>Boiling point / boiling range</strong></td>
<td>100 °C</td>
<td></td>
</tr>
<tr>
<td><strong>Melting point / melting range</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Setting point / solidification range</strong></td>
<td>0 °C</td>
<td></td>
</tr>
<tr>
<td><strong>Decomposition point / decomposition range</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Oxidising properties</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Lower flammability or explosive limits</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Upper flammability or explosive limits</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>1.0 g/ml</td>
<td></td>
</tr>
<tr>
<td><strong>Reference temperature</strong></td>
<td>20 °C</td>
<td></td>
</tr>
</tbody>
</table>
Solubility in water
Remarks soluble

Solubility(ies)
No data available

Partition coefficient: n-octanol/water
No data available

Viscosity
No data available

9.2 Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
No data available.

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
Temperatures > 50°C.

10.5 Incompatible materials
Acids; Alcalis; Reducing agents; Oxidizing agents; Water

10.6 Hazardous decomposition products
No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity
LD50 > 5000 mg/kg
Species rat
Source Manufacturer

Acute dermal toxicity
Remarks No data available.

Acute inhalational toxicity
Remarks No data available.

Skin corrosion/irritation
Source Manufacturer
Evaluation slightly irritant

Serious eye damage/irritation
Source Manufacturer
Evaluation slightly irritant

Respiratory or skin sensitisation
Route of exposure Skin
Remarks Allergic skin reaction possible in case of repeated or prolonged contact.

Germ cell mutagenicity
No data available
Reproduction toxicity
No data available

Carcinogenicity
No data available

STOT-single exposure
No data available

STOT-repeated exposure
No data available

Aspiration hazard
No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Product contact may lead to sensitisation with sensitive persons.

Other information
Exercise customary precautions when handling chemicals.

SECTION 12: Ecological information

12.1 Toxicity

Fish toxicity
No data available

Daphnia toxicity
No data available

Algae toxicity
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability
No data available.

12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment

<table>
<thead>
<tr>
<th>Results of PBT and vPvB assessment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT assessment</td>
<td>The product is not considered to be a PBT.</td>
</tr>
<tr>
<td>vPvB assessment</td>
<td>The product is not considered to be a vPvB.</td>
</tr>
</tbody>
</table>

12.6 Other adverse effects
No data available.

12.7 Other information

Other information
The active component ortho-phthalaldehyde is classified as toxic (Category 1) to aquatic organisms and is not considered readily biodegradable.
Do not discharge product unmonitored into the environment.
SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging
Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN
The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG
The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA
The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information
No data available.

14.6 Special precautions for user
No data available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not relevant

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations
Remarks Annex I, part 1 + 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

15.2 Chemical safety assessment
No data available.
SECTION 16: Other information

Changes made since the last version

Sources of key data used to compile the data sheet:
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.

Department issuing safety data sheet
Ingenieur- und Sachverständigenbüro ROLAND BRAUN
Peter-Timm-Straße 21, D-22457 Hamburg
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This information is based on our present state of knowledge. The security data sheet describes products with a view to the security requirements. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.