

## Material Safety Data Sheet

MSDS-09588-0-001

**Rev.:** F  
**Product:** CIDEX® OPA Solution  
**Issue Date:** 10-01-2007

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

**Supplier:**

Advanced Sterilization Products  
 33 Technology Drive  
 Irvine, CA 92618

**Customer service telephone:** 1-800-755-5900  
**Emergency telephone number:** 1-877-208-6653 24 hrs  
**Product name:** CIDEX OPA Solution  
**Synonyms:** None

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

The ingredients at their given percentages in this product are not considered hazardous to your health.

Components	CAS Number	Weight %	J&J - OEL Data (TWA - 8 hr)	J&J - OEL Data (STEL):	J&J - OEL Data (Ceiling Limit Value):	J&J - PBOEL
<i>ortho</i> -Phthalaldehyde (1,2 - benzenedicarboxaldehyde)	643-79-8	<1	Not Determined	Not Determined	Not Determined	Not Determined

### 3. HAZARDS IDENTIFICATION

**Emergency overview:** CIDEX OPA Solution has been reported to cause anaphylactic-like reactions in bladder cancer patients undergoing repeated cystoscopy. CIDEX OPA Solution should not be used to reprocess instruments for patients that have shown previous sensitivity to this solution or any of its ingredients.

**Properties affecting health:** May cause sensitization by repeated skin contact.

**Principle routes of exposure:**

**Oral:** Not toxic by oral route. Not anticipated to be a significant route of exposure.  
**Eye contact:** May cause eye irritation and redness.  
**Skin contact:** Not toxic by dermal route. May cause skin irritation. Repeated exposure may cause skin dryness or cracking. Exposure to skin may cause temporary staining.  
**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Exposure can irritate and discolor the tissues of the mouth, esophagus and other tissues of the digestive tract.

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**Inhalation:** May cause irritation, including but not limited to discharge, coughing, wheezing tightness of chest and throat, difficulty breathing and stinging sensation in nose and throat, tingling of mouth and lips, headache, lose of smell and dry mouth. Symptoms are temporary and reversible.

**Hazard information:**

**Target organ effects:** None  
**Reproductive effects:** This material is not reported to cause reproductive effects in humans.  
**Mutagenic effects:** Not mutagenic in the Ames assay.  
**Sensitization:** May cause sensitization.

**Carcinogenicity rating:**

Components	CAS Number	J & J:	NTP:	IARC:	California Proposition 65 List:
<i>ortho</i> -Phthalaldehyde (1,2 – benzenedicarboxaldehyde)	643-79-8	Not Determined	Not Determined	Not Determined	Not Determined

**Signs and symptoms:** None.

**Medical conditions aggravated by exposure:** Inhalation of vapor may cause asthma-like symptoms (chest discomfort and tightness, difficulty with breathing) as well as aggravate pre-existing asthma.

**4. FIRST AID MEASURES**

**Eye contact:** In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical attention.

**Ingestion:** Do not induce vomiting. Rinse mouth followed by drinking a large quantity of water.

**Inhalation:** Move to fresh air immediately. If experiencing difficulty breathing, seek medical attention.

**Skin contact:** Wash contaminated areas thoroughly with soap and water.  
Remove contaminated clothing and wash before re-use.  
Seek medical attention if irritation develops or persists.

**Protection of first-aiders:** None.

**Notes to physician:** Probable damage to the mucosa from oral exposure may contraindicate the use of gastric lavage.

## 5. FIRE-FIGHTING MEASURES

Flash point (°F):	Not applicable
Flash point (°C):	Not applicable
Autoignition temperature:	Not applicable
Flammable limits in air - lower (%):	Not applicable
NFPA rating:	Health: 1 flammability: 0 reactivity: 0

### Fire fighting information:

<b>Suitable extinguishing media:</b>	Use any extinguishing agent which is suitable for the surrounding fire
<b>Extinguishing media which must not be used for safety reasons:</b>	None
<b>Specific methods:</b>	None
<b>Special protective equipment for firefighters:</b>	Wear self-contained breathing apparatus for fire fighting if necessary.
<b>Hazardous combustion products:</b>	None
<b>Explosivity:</b>	None
<b>Explosion limits:</b>	
lower:	None
upper:	None

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions:</b>	Wear eye and skin protection while handling material for clean-up. Avoid breathing vapors and/or mists. Responders should wear chemical resistant gloves and suitable body protection. Where there is a risk of product contact with shoe, chemical resistant shoe coverings are recommended.
<b>Environmental precautions:</b>	Do not wash down sewers or waterways.
<b>Methods for cleaning up:</b>	If required, neutralize by sprinkling approximately 25 grams of glycine (CAS# 56-40-6) powder per gallon of CIDEX OPA Solution spill. Thoroughly blend the glycine into the spill using mop or other tools. Allow 5 minutes contact for neutralization. Pick up and transfer to properly labeled containers. Allow neutralization to continue for 1 hour and then dispose of in accordance with all applicable federal, state, and local regulations. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Handling:

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<b>Technical measures/precautions:</b>	Use in well ventilated area and use with appropriate exhaust ventilation, for example a minimum of 10 air exchanges per hour or as defined by state and local regulations.
<b>Safe handling advice:</b>	Wear appropriate personal protection. Avoid contact with skin, eyes and clothing. Remove contaminated clothing and laundry before reuse.
<b>Storage:</b>	
<b>Technical measures/storage conditions:</b>	This product should be stored between 59°F (15°C) and 86°F (30°C) Keep containers tightly closed.
<b>Incompatible products:</b>	Avoid contact with strong acids and bases. Keep from contact with oxidizing materials.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering controls:</b>	Ensure adequate ventilation.
<b>Eye protection:</b>	Eye protection required.
<b>Hand protection:</b>	Chemical resistant gloves required.
<b>Skin and body protection</b>	Wear suitable protective clothing.
<b>Respiratory protection:</b>	None required.
<b>Other/general protection:</b>	None required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear
<b>Physical state:</b>	Liquid
<b>Color:</b>	Light blue
<b>pH:</b>	7.2-7.8
<b>Odor:</b>	Slight Odor
<b>Boiling temperature (°F):</b>	212
<b>Boiling temperature (°C):</b>	100
<b>Freezing point/range (°C):</b>	0
<b>Freezing point/range (°F):</b>	32
<b>Specific gravity:</b>	1.0003g/cc
<b>Evaporation rate:</b>	similar to water
<b>Water solubility:</b>	soluble

## 10. STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Stable under recommended storage conditions.
<b>Hazardous polymerization:</b>	Hazardous polymerization does not occur.
<b>Hazardous decomposition products:</b>	Unknown on product.
<b>Materials to avoid:</b>	Strong acids and strong bases. Stay away from strong oxidizing agents.
<b>Conditions to avoid:</b>	Extremes of temperature and direct sunlight.

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50/oral/rat (mg/kg) = >5000 mg/kg  
LD50 Dermal Rabbit (mg/kg): >2000 mg/kg

### Local effects

Oral: Non-toxic  
Eye irritation: May cause eye irritation.  
Skin irritation: May cause skin irritation.  
Inhalation: Unknown on product.

### Chronic toxicity

Oral: Unknown on product.  
Inhalation: Unknown on product.  
Dermal: Unknown on product.

### Subchronic toxicity

Oral: Oral administration of o-phthalaldehyde (active ingredient) to rats for 90 days resulted in a NOEL of 5mg/kg/day.  
Dermal: Unknown on product.

### Specific effects

Corrosive effects: Not corrosive.  
Sensitization: May elicit an allergic reaction.  
Target organ effects: None  
Mutagenic effects: Not mutagenic in Ames test.

Reproductive effects: Unknown on product.  
Developmental effects: Oral administration of o-phthalaldehyde (active ingredient) to pregnant rats indicated that at maternally non-toxic doses (less than 10 mg/kg/day) there was no developmental effect.

Carcinogenic effects: Unknown on product.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

Ecotoxicity effects: Unknown on this product.  
Aquatic toxicity effects: This product is harmful to aquatic organisms.

Mobility: Unknown on product.  
Persistence / degradability: Unknown on product.  
Bioaccumulation: Unknown on product.  
Degradation: Unknown on product.

## 13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Waste disposal must be in accordance with appropriate US, Federal, State, Local and International regulations.

Contaminated packaging: Do not re-use empty containers

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**Methods for cleaning up:**

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Clean contaminated surface thoroughly.

<b>14. TRANSPORT INFORMATION</b>
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**DOT:**

<b>DOT UN-No:</b>	Not applicable
<b>DOT shipping name:</b>	Not regulated
<b>Hazard class:</b>	Not applicable
<b>Subsidiary risk (hazard class):</b>	Not applicable
<b>Packing group:</b>	Not applicable
<b>DOT reportable quantity (lbs):</b>	Not applicable

**IMO/IMDG:**

<b>Hazard class:</b>	Not applicable
<b>IMDG page:</b>	Not applicable
<b>IMDG-labels:</b>	Not applicable
<b>Packing group:</b>	Not applicable
<b>MFAG table No.:</b>	Not applicable
<b>Proper shipping name:</b>	Not regulated
<b>UN/Id No.:</b>	Not applicable

**ADR/RID:**

<b>Hazard class/packing group:</b>	Not applicable
<b>Item:</b>	Not applicable
<b>ADR/RID-labels:</b>	Not applicable
<b>UN/Id No.:</b>	Not applicable
<b>Proper shipping name:</b>	Not regulated
<b>TREM-card:</b>	Not applicable

**IATA/ICAO:**

<b>Hazard class:</b>	Not applicable
<b>Packing group:</b>	Not applicable
<b>Proper shipping name:</b>	Not regulated
<b>ID/UN No.:</b>	Not applicable
<b>IATA - label:</b>	Not applicable
<b>ERG #</b>	Not applicable

**TDG (Canada):**

<b>Status:</b>	Not applicable
<b>Packing group:</b>	Not applicable

<b>15. REGULATORY INFORMATION</b>
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**SARA (311, 312) hazard class:**

<b>Immediate health:</b>	None
<b>Delayed health:</b>	None
<b>Fire:</b>	None
<b>Sudden Release of Pressure Hazard:</b>	None

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**Reactivity:** None

**TSCA inventory list:** Listed under TSCA: Yes

**WHMIS:**

**WHMIS trade secret:** None

**WHMIS hazard class:** None

**Canada DSL inventory list:** Listed on DSL: Yes

**Notes:**

1. SARA = Superfund Amendments and the Reauthorization Act.
2. CERCLA = Comprehensive Environmental Response, Compensations and Liability Act.
3. FIFRA = Federal Insecticide, Fungicide and Rodenticide Act
4. TSCA = Toxic Substance Control Act
5. WHMIS = Canadian Workplace Hazardous Materials Information System
6. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

**16. OTHER INFORMATION**

**This data sheet contains changes from the previous version in section(s):**

None

**Additional advice** None

**Literary Reference:** None

**MSDS format:** North American Format - U.S. and Canada  
This Material Safety Data Sheet was prepared in accordance with OSHA 29 CFR 1910.1200.

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**End of Safety Data Sheet**

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