

ADVANCED STERILIZATION PRODUCTS A JOHNSON & JOHNSON CO. -- CIDEX OPA SOLUTION --
6840-01-238-6222

===== Product Identification =====

Product ID:CIDEX OPA SOLUTION

MSDS Date:10/25/1999

FSC:6840

NIIN:01-238-6222

Status Code:A

MSDS Number: CLJVV

=== Responsible Party ===

Company Name:ADVANCED STERILIZATION PRODUCTS A JOHNSON & JOHNSON CO.

Address:33 TECHNOLOGY DR

City:IRVINE

State:CA

ZIP:92618-2346

C

Country:US

Info Phone Num:800-755-5900/888-783-7723

Emergency Phone Num:(800)424-9300

Resp. Party Other MSDS Num.:015

Chemtrec Ind/Phone:(800)424-9300

CAGE:04ES7

=== Contractor Identification ===

Company Name:ADVANCED STERILIZATION PRODUCTS A JOHNSON & JOHNSON CO.

Address:33 TECHNOLOGY DR

Box:City:IRVINE

State:CA

ZIP:92618-2346

Country:US

Phone:800-755-5900/888-783-7723

CAGE:04ES7

===== Composition/Information on Ingredients =====

Ingred Name:ACTIVE INGREDIENT

= Wt:.55

Ingred

Name:INACTIVE INGREDIENTS

= Wt:99.45

===== Hazards Identification =====

LD50 LC50 Mixture:LD50: ORAL, RAT: > 2000 MG/KG

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:TARGET ORGANS: SKIN, EYES, RESPIRATORY TRACT. ACUTE: THE MOST LIKELY SYMPTOM OF ACUTE OVEREXPOSURE WOULD BE SLIGHT IRRITATION OF CONTAMINATED SKIN, OR EYE IRRITATION AFTER CONTACT WITH MISTS OF THIS PRODUCT. CHRONIC: PROLONGED OR REPEATED

CONTACT WITH THE SKIN MAY LEAD TO DERMATITIS.

Explanation of Carcinogenicity:THIS PRODUCTS COMPONENTS ARE NOT FOUND ON THE FOLLOWING LISTS: US FEDERAL OSHA Z LIST, NTP, IARC, AND CAL/OSHA AND THEREFORE ARE NEITHER CONSIDERED TO BE NOR SUSPECTED TO BE CANCER-CAUSING AGENTS BY THESE AGENCIES.

Effects of Overexposure:THIS PRODUCT IS PREDOMINATELY WATER & PRESENTS MINIMAL HAZARDS. INHALATION-BREATHING MIST/SPRAY MAY MILDLY IRRITATE THE NOSE, THROAT & RESPIRATORY SYSTEM. SYMPTOMS INCLUDE

COUGHING & SNEEZING. CONTACT WITH SKIN/EYES-PERSONS WITH POTENTIAL EXPOSURE SHOULD NOT WEAR CONTACT LENSES. EYE CONTACT MAY CAUSE STINGING, EXCESS TEARING, & REDNESS. SKIN CONTACT MAY CAUSE STAINING & BE MILDLY IRRITATING. REPEATED SKIN CONTACT MAY CAUSE DERMATITIS (RED, CRACKED SKIN). INGESTION-INGESTION MAY IRRITATE THE TISSUE OF THE MOUTH, ESOPHAGUS DIGESTIVE SYSTEM. SYMPTOMS MAY INCLUDE VOMITING, DIARRHEA, & NAUSEA. INJECTION-PAIN, MILD IRRITATION, & SWELL

Medical Cond Aggravated by Exposure:PRE-EXISTING BRONCHITIS OR ASTHMA CONDITIONS CAN BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. HEATING OF THE SOLUTION WILL INCREASE ITS POTENTIAL FOR IRRITATION.

===== First Aid Measures =====

First Aid:SKIN: S28: AFTER CONTACT WITH CIDEX OPA SOLUTION, WASH IMMEDIATELY WITH PLENTY OF WATER. IF A SKIN REACTION SHOULD OCCUR, SEEK MEDICAL ADVICE. EYE: S26: IN CASE OF CONTACT WITH EYES, RINSE

IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE IF IRRITATION OR DISCOMFORT PERSISTS. INHALATION: IF VAPORS OR MISTS OF THIS PRODUCT ARE INHALED, REMOVE VICTIM TO FRESH AIR, AND SEEK MEDICAL ADVICE. INGESTION: S46: IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW PACKAGE OR LABEL. CALL PHYSICIAN OR YOUR LOCAL POISON CONTROL CENTER FOR MOST CURRENT INFORMATION.

===== Fire Fighting Measures =====

Extinguishing Media:SELECT FIRE EXTINGUISHING MEDIA APPROPRIATE FOR THE SURROUNDING AREA.

Fire Fighting Procedures:INCIPIENT FIRE RESPONDERS SHOULD WEAR EYE PROTECTION. STRUCTURAL FIREFIGHTERS MUST WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE EQUIPMENT. MOVE FIRE-EXPOSED CONTAINERS IF IT CAN BE DONE WITHOUT RISK TO FIREFIGHTERS. SEE OTHER INFORMATION.

Unusual Fire/Explosion Hazard:MINIMAL RISK OF WATER EVAPORATION IN A FIRE CAUSING REMAINING MATERIAL TO BURN AND PRODUCE CARBON MONOXIDE AND/OR CARBON DIOXIDE.

===== Accidental Release Measures =====

Spill Release Procedures:SMALL RELEASES CAN BE CLEANED UP USING A DAMP SPONGE OR POLYPAD. RESPONDERS SHOULD WEAR GLOVES, GOGGLES, & SUITABLE BODY PROTECTION DURING THE CLEAN UP OF SPILL. IN CASE OF LARGE SPILL, CLEAR THE AFFECTED AREA, RESPOND WITH TRAINED PERSONNEL & CONTAIN THE SPILL. MINIMUM PERSONAL PROTECTIVE EQUIPMENT SHOULD BE LEVEL D: (SAFETY GLASSES, GLOVES, APRON OR LAB COAT). "SEE OTHER INFO"

Neutralizing Agent:APPROX 25 GRAMS OF GLYCINE (FREE BASE) POWDER PER GALLON OF ESTIMATED CIDEX OPA SOLUTION SPILL.

===== Handling and Storage =====

Handling and Storage Precautions:ALL EMPLOYEES WORKING WITH THIS PRODUCT MUST BE PROPERLY TRAINED. STORE CONTAINERS IN A COOL, DRY LOCATION (15-30C, 59-86F) AWAY FROM DIRECT SUNLIGHT, OR SOURCES OF INTENSE HEAT. STORE AWAY FROM INCOMPATIBLE MATERIALS. KEEP CO

CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.

Other Precautions:STORAGE- INSPECT ALL INCOMING CONTAINERS BEFORE STORAGE TO ENSURE CONTAINERS ARE PROPERLY LABELED AND NOT DAMAGED. EMPTY CONTAINERS MAY CONTAIN RESIDUAL AMOUNTS OF THIS PRODUCT AND MUST BE TRIPLE RINSED PRIOR TO DISPOSAL.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NONE NORMALLY REQUIRED FOR ROUTINE USE. IF RESPIRATORY PROTECTION IS NEEDED, SUCH AS DURING USE OF THIS PRODUCT WITH OTHER MATERIALS, OR DURING EMERGENCY RESPONSE TO UNCONTROLLED RELEASES, USE ONLY PROTECTION AUTHORIZED IN 29 CFR 1910.134.

Ventilation:USE WITH ADEQUATE VENTILATION TO ENSURE EXPOSURE LEVELS ARE MAINTAINED BELOW THE LIMITS PROVIDED IN COMPOSITION AND INFORMATION ON INGREDIENTS.

Protective Gloves:LATEX OR NITRILE RUBBER GLOVES. LATEX SHOULD BE CHANGED OFTEN.

Eye Protection:SAFETY GLASSES.

Other Protective Equipment:USE TRIPLE GLOVES FOR SPILL RESPONSE. USE BODY

PROTECTION APPROPRIATE FOR TASK (E.G. FLUID-RESISTANT GOWNS OR APRONS).

Work Hygienic Practices:AS WITH ALL CHEMICALS, AVOID GETTING THIS PRODUCT ON YOU OR IN YOU. WASH THOROUGHLY AFTER HANDLING THIS PRODUCT. DO NOT EAT, DRINK, SMOKE, OR APPLY COSMETICS WHILE HANDLING THIS PRODUCT.

Supplemental Safety and Health

HYGIENE: AVOID BREATHING MISTS & SPRAYS OF THIS PRODUCT. USE IN A WELL-VENTILATED LOCATION. REMOVE CONTAMINATED CLOTHING IMMEDIATELY. *TRADE NAME: CIDEX OPA SOLUTION.

CHEMICAL NAME/CLASS:

ALDEHYDE & INORGANIC SALT SOLUTION. PRODUCT USE: HIGH LEVEL DISINFECTANT.

===== Physical/Chemical Properties =====

HCC:B3

Boiling Pt:=100.C, 212.F

Melt/Freeze Pt:=0.C, 32.F

Vapor Pres:NE

Vapor Density:NE

Spec Gravity:1.0003 G/CC

pH:7.2 - 7.8

Viscosity:NE

Evaporation Rate & Reference:SIMILAR TO WATER

Solubility in Water:SOLUBLE

Appearance and Odor:CLEAR LIGHT BLUE LIQUID, PRACTICALLY ODORLESS.

===== Stability and

Reactivity Data =====

Stability Indicator/Materials to Avoid: YES
MATERIALS THAT ARE INCOMPATIBLE WITH WATER. STRONG ACIDS AND STRONG
OXIDIZERS. STRONGLY ALKALINE MATERIALS (>PH 10) WILL CATALYZE A
REDOX REACTION, WHICH IS EXOTHERMIC, BUT IS NOT EXPECTED TO BE OF A
VIOLENT NATURE.
Hazardous Decomposition Products: PRODUCTS OF THERMAL DECOMPOSITION
INCLUDE CARBON OXIDES.
Conditions to Avoid Polymerization: AVOID EXPOSURE OR CONTACT TO EXTREME
TEMPERATURES, INCOMPATIBLE CHEMICALS.

===== Toxicological Information =====

Toxicological Information: CIDEX OPA SOLUTION: EYE EXPOSURE
(RABBIT)=SLIGHTLY IRRITATING, BUT REVERSIBLE IN SEVEN DAYS.
LD50(SKIN, RABBIT)>2000 MG/KG. IRRITANCY OF PRODUCT: THIS PRODUCT
MAY BE MILDLY IRRITATING TO CONTAMINATED TISSUE, ESPECIALLY AFTER
PROLONGED OR REPEATED EXPOSURE. SENSITIZATION TO THE PRODUCT:
O-PHTHALALDEHYDE (A COMPONENT OF THIS PRODUCT PRESENT IN < 1%
CONCENTRATION) IS A POTENTIAL SKIN & RESPIRATORY SENSITIZER. DUE
TO THE LOW CONCENTRATION OF O-PHTHALALDEHYDE (0.55%) IN THE PRODUCT,
THIS HAZARD IS GREATLY MINIMIZED. RECOMMENDATIONS TO PHYSICIANS:
PROBABLE MUCOSAL DAMAGE FROM ORAL EXPOSURE MAY CONTRAINDICATE THE
USE OF GASTRIC LAVAGE.

===== Ecological Information =====

Ecological: ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING
ENVIRONMENTAL CONTAMINATION. ENVIRONMENTAL STABILITY: THE
COMPONENTS OF THIS PRODUCT WILL SLOWLY DECOMPOSE INTO INORGANIC &
ORGANIC COMPOUNDS. THE FOLLOWING ENVIRONMENTAL DATA ARE AVAILABLE
FOR THE COMPONENTS OF THIS PRODUCT: O-PHTHALALDEHYDE: WATER
SOLUBILITY=53 G/L/20C.

===== Disposal Considerations =====

Waste Disposal Methods: WASTE DISPOSAL MUST BE IN ACCORDANCE WITH
APPROPRIATE U.S. FEDERAL, STATE, AND LOCAL REGULATIONS OR WITH
REGULATIONS OF CANADA OR EC MEMBER STATES. IF PERMITTED FOR
DISPOSAL TO THE SEW

ER BY LOCAL AND STATE AUTHORITIES, SPENT CIDEX
OPA SOLUTION MAY BE PUT DOWN THE DRAIN. SEE PRODUCT INSERT FOR
FURTHER INFORMATION.

===== MSDS Transport Information =====

Transport Information: THIS MATERIAL IS NOT HAZARDOUS PER THE U.S.
DEPARTMENT OF TRANSPORTATION (49 CFR 172.101). PROPER SHIPPING
NAME: NOT APPLICABLE. HAZARD CLASS NUMBER AND DESCRIPTION: NOT
APPLICABLE. UN IDENTIFICATION NUMBER: NOT APPLICABLE. PACKING
GROUP: NOT APPLICABLE. DOT LABEL(S) REQUIRED: NOT APPLICABLE.
NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER, 1998: NOT
APPLICABLE. MARINE POLLUTANT: NO COMPONENT OF THIS PRODUCT IS
DESIGNATED AS A MARINE POLLUTANT, PER APPENDIX B TO 49 CFR 172.101.
TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:
THIS MATERIAL IS NOT CONSIDERED AS DANGEROUS GOODS.

===== Regulatory Information =====

SARA Title III Information: U.S. SARA REPORTING REQUIREMENTS: THE
COMPONENTS OF THIS PRODUCT ARE NOT SUBJECT TO THE REPORTING
REQUIREMENTS OF SECTION 302, 304, & 313 OF TITLE OF THE SUPERFUND
AMENDMENTS & REAUTHORIZATION ACT. U.S. SARA THRESHOLD PLANNING
QUANTITY: NOT APPLICABLE. U.S. CERCLA REPORTABLE QUANTITY (RQ):
NOT APPLICABLE. U.S.
Federal Regulatory Information: U.S. TSCA INVENTORY STATUS: THE
COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY.
State Regulatory Information: CALIFORNIA SAFE DRINKING WATER ACT
AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): NO COMPONENT OF THIS PRODUCT IS
ON THE CALIFORNIA PROPOSITION 65 LISTS.

===== Other Information =====

Disclaimer (provided with this information by the compiling agencies):
This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for

its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.