

MATERIAL SAFETY DATA SHEET**SDP Alpha Developer L****SECTION 1: PRODUCT IDENTIFICATION AND USE****Product Name:** SDP ALPHA DEVELOPER L**Product Code(s):** αDVL20L**Formula:** Clear, odorless, aqueous photochemical solution containing sodium hydroxide**Manufacturer / Supplier:** Mitsubishi Imaging (MPM), Inc. - 555 Theodore Fremd Avenue - Rye, NY 10580**Emergency Telephone Number:** Chemtrec (800) 424-9300 Outside USA (703) 527-3887**SECTION 2: HAZARDOUS INGREDIENTS**

Principal Component(s)	Cas Reg #	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)	%WT (w/w)
Sodium Hydroxide	1310-73-2	2.0 (ceiling)	2.0 (ceiling)	1-5
Sodium Sulfite	7757-83-7	Not Estab.	Not Estab.	10-15
Hydroquinone	123-31-9	2.0 TWA	2.0 TWA	1-5

SECTION 3: HAZARDOUS IDENTIFICATION**EMERGENCY OVERVIEW**

DANGER! Corrosive. May cause eye, skin, and respiratory tract burns. May cause allergic respiratory reactions. May cause allergic skin reaction. Irritating gases/fumes may be given off during burning or thermal decomposition.

POTENTIAL HEALTH EFFECTS

Eye Contact: Corrosive; contact with eyes is painful and irritating and will cause chemical burns. Permanent eye damage may result to eyes if there is any delay in flushing eyes after exposure. Repeated and prolonged exposure or overexposure can result in lacrimation, chronic conjunctivitis, intolerance to light and pigment deposition.

Skin Contact: Corrosive and irritating; chemical burns may result from contact. Severe irritant; symptoms of reddening, rash, hives, swelling, and itching may occur. Repeated contact may cause skin drying, ulcerations or allergic reactions.

Ingestion: Corrosive and irritating to the digestive tract; may cause burning pain in the mouth, throat, esophagus, and stomach. Ingredients may gastric distress, stomach pains, nausea, vomiting, dizziness, disorientation and bluish skin color.

Inhalation: Corrosive and irritating to upper respiratory tract and mucous membranes. Inhalation of vapors may cause sore throat, coughing, choking, runny nose and inflammation of the respiratory tract. Prolonged exposure may cause discomfort and ulceration of the nasal passages. Repeated or prolonged exposure to sulfites may cause an allergic respiratory reaction in previously exposed individuals.

Carcinogenicity: NTP: N/A IARC Monographs: N/A OSHA Regulated: N/A
None of the chemicals used in this product are listed on NTP, IARC or OSHA listings of human carcinogens.

Other Health Hazards: Medical Conditions Aggravated by exposure - Persons with pre-existing eye, skin, or respiratory tract disorders may be more susceptible to the effects of this product.

SECTION 4: FIRST AID MEASURES

Eye: Immediately flush eyes with plenty of water for at least 15 minutes. Contact physician.

Skin: Promptly wash the exposed area thoroughly with water and soap for 15 minutes. Remove contaminated clothing. In case of continued irritation, contact a physician.

Ingestion: Rinse mouth with plenty of water and contact a physician.

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Contact a physician.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties: Non-combustible

Flammable Limit: LFL: N/A UFL: N/A

Extinguishing Media: Material is not combustible. Use extinguishing media suitable for other combustible materials in area.

Special Fire Fighting Procedures: Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus.

Unusual Fire Hazards: When heated to decomposition, emission of toxic fumes of SO₂ is possible.

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Steps to be Taken in case Material is Released or Spilled: Use appropriate protective equipment during clean-up. Dike spill. Prevent liquid from entering sewers, waterways, or low areas. Soak up with sawdust, sand, oil dry or other absorbent material. Spill may be neutralized with powdered Citric Acid. For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions to be Taken in Handling and Storing: Store between 40°F (4.4°C) and 80°F (26°C). Preferred storage is at 68°F (20°C). Keep from freezing. Avoid eye and skin contact, and store in a well-ventilated area. Keep container tightly closed. Do not store with incompatible materials. Do not store or consume food, drink or tobacco in area where they may become contaminated with this material. Keep this and all chemicals out or reach of children.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Use sufficient general room ventilation and/or local exhaust to maintain airborne levels of vapors below applicable exposure limits (see section 2).

Respiratory Protection: Under normal conditions of use, respirator protection is not required. If respirators are used, institute a program in accordance with OSHA standard 29CFR1010.134

Eye Protection: Wear safety glasses or goggles

Protective Gloves: Use chemical resistant gloves and aprons (e.g. neoprene, rubber or vinyl).

Additional Protective Measures: Emergency showers and eye wash stations should be made available. Educate and train employees in the safe use and handling of this product. Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Clear, colorless, odorless liquid.

Vapor Pressure: Not established

pH: Approx. 12.6

Specific Gravity: Approx. 1.14

Boiling Point: Approx. 212°F (100°C)

Solubility in Water: Soluble

Melting Point: Less than 32°F (0°C)

Viscosity: N/D

Volatile Organic Content: N/D

Vapor Density: N/D

VOC Composite Partial Pressure (mm Hg at 20°C): N/D

Evaporation Rate: N/D

Percent Volatility (as water): N/D

Photo Chemical Reactivity(SCAQMD Rule 443): N/D

SECTION 10: STABILITY AND REACTIVITY

Stability: This is a stable material

Instability Conditions: None known.

Incompatibility: Strong acids, oxidizers.

Hazardous Decomposition: Oxides of sulfur

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Chemical Name	CAS #	LD50 of Ingredients (Specify species and route)	LC50 of Ingredients (Specify species)
Hydroquinone	123-31-9	320 mg/kg oral-rat	Not Established
Sodium Hydroxide	1310-73-2	40 mg/kg IPR-mouse	Not Established

Hydroquinone

Chronic Toxicity: Adverse kidney effects have been observed primarily in one strain of male rat (F-344) following chronic administration of oral doses of Hydroquinone. Nephropathy did not occur in two other strains of rats, mice, or dogs. *

Carcinogenicity: Formation of benign kidney tumors occurred only after nephropathy developed and only in one strain of male rat. Additional effects have been reported. Although, an increase in leukemia was reported in the female F-344 rat, this result was not reproduced in subsequent study. There was no evidence of cancer in male mice following chronic oral administration of hydroquinone. Increase in primarily benign tumors were noted in female mice, although this finding was not reproduced in subsequent study. No tumors were reported in mice following long-term dermal application of hydroquinone. *

Mutagenicity: Studies using Ames' test were generally negative. There is some evidence for mutagenicity from studies in animals, in isolated cells taken from animals and plants, and in other microorganisms.*

Developmental Toxicity: Hydronquinone has not caused birth defects when administered orally at dose levels not causing systemic toxicity in the mother.*

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Reproduction: Hydroquinone has not caused reproductive effects in male or female animals when administered orally at dose levels not causing systemic toxicity in the mother.*

* Hydroquinone Health, Safety, and Environmental Information, Eastman Chemical Company

SECTION 12: ECOLOGICAL INFORMATION

No ecological information is available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Recover nonusable free liquid and / or contaminated water, and dispose in accordance with Federal, State and Local regulations. Remove nonusable solid material and / or contaminated soil, for disposal in an approved and permitted landfill. Discharge to sewer may require approval of permitting authority and may require pretreatment. Refer to the latest EPA or State Regulations regarding proper disposal.

SECTION 14: TRANSPORTATION INFORMATION

Proper Shipping Name: Sodium Hydroxide Solution

D.O.T. Hazard Class/Pack Group: 8 / II

UN / NA Identification Number: UN1824

Hazard Label: Corrosive

Hazard Placard: Corrosive

Limited Quantity Exception may apply to this product, for "inner packagings not over 1.0L (0.3 gal) for liquids and 1.0kg (2.2 lb) for solids" 173.154 (b) (1). Each package must conform to the packaging requirements of Subpart B of Part 173 and may not exceed 30kg (66lb) gross weight. For further information contact CFR49.

IMO Shipping Name: Sodium Hydroxide Solution

IMO Hazard Class/Pack Group: 8 / II

IATA Shipping Name: Sodium Hydroxide Solution

IATA Hazard Class/Pack Group: 8 / II

Passenger Air - Max Qty: 1 L

Passenger Air Packing Instructions: 809

Cargo Air - Max Qty: 30L

Cargo Air Packing Instructions: 813

SECTION 15: REGULATORY INFORMATION

OSHA: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR1910.1200

TSCA (USA - Toxic Substance Control Act): On TSCA Inventory.

CERCLA (USA - Comprehensive Response Compensation and Liability Act):

Sodium Hydroxide (CAS# 1310-73-2) - 1000 lbs.

Hydroquinone (CAS# 123-31-9) - 100lbs

SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):

Section 302 Extremely Hazardous Substances: Hydroquinone (CAS# 123-31-9) 1-5%

Section 311/312 Hazard Categories: Immediate Health Hazard

Section 313 Toxic Chemicals: Hydroquinone (CAS# 123-31-9) 1-5%

RCRA: When discarded in its purchased form, this product meets the criteria of Corrosivity, and should be managed as a hazardous waste (EPA Hazard Waste Number D002). (40 CFR 261.20-24)

The following chemicals are specifically listed by individual states; other products specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For detail on your regulatory requirements you should contact the appropriate state agency.

Component Name/

CAS Number	Concentration	State Code
Sodium Hydroxide 1310-73-2	1-5 %	PA1, PA4, MA, NJ1, NJ3
Water 7732-18-5	80-85 %	PA3, NJ4
Sodium Sulfite 7757-83-7	10-15 %	PA3, NJ4
Hydroquinone 123-31-9	1-5 %	PA1, PA4, MA, NJ1, NJ3

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MA: Massachusetts Hazard Substance List
 NJ1: New Jersey Hazard Substance List
 NJ3: New Jersey Special Health Hazard Substance List
 NJ4: New Jersey Other - included in 5 predominant ingredients >1%
 PA1: Pennsylvania Hazard Substance List
 PA3: Pennsylvania Non-Hazardous present at 3% or greater
 PA4: Pennsylvania Environmental Hazardous Substance Lis.

SECTION 16: OTHER INFORMATION**HMIS Rating:**

Health (Blue)	3
Flammability (Red)	0
Reactivity (Yellow)	0
Protective Equipment	B

HMIS HAZARD INDEX:

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

B=Safety glasses and gloves

Revision Summary:

This MSDS has been revised in the following sections: No revisions available

Prepared by (Group, Department, etc.):

Mitsubishi Imaging (MPM), Inc.

Phone Number:

(914) 925-3200

Date:

September 27, 2006

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