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

- · 1.1 Product identifier
- · Trade name: SDP-α EDVL alpha Violet Eco Developer
- · Article number: No other identifiers
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture Industrial uses.
- · 1.3 Details of the supplier of the Safety Data Sheet
- · Manufacturer/Supplier:

Mitsubishi Imaging (MPM), Inc. 555 Theodore Fremd Avenue Rye, NY 10580 USA

Phone: (914)925-3200



· 1.4 Emergency telephone number:

**CHEMTREC** 

1-800-424-9300 (US/Canada) +01 703-527-3887 (International)

#### **SECTION 2: Hazards identification**

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Classifications listed also are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).



health hazard

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 2 H351 Suspected of causing cancer.



corrosion

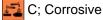
Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



Skin Sens. 1 H317 May cause an allergic skin reaction.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



R34: Causes burns.

Xn; Harmful

R40-68: Limited evidence of a carcinogenic effect. Possible risk of irreversible effects.

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🗶 Xi; Sensitising

R43: May cause sensitisation by skin contact.
R31: Contact with acids liberates toxic gas.

### · Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

### · Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

#### Additional information:

There are no other hazards not otherwise classified that have been identified.

0 percent of the mixture consists of component(s) of unknown toxicity

#### · 2.2 Label elements

#### · Labelling according to Regulation (EC) No 1272/2008

The product is additionally classified and labelled according to the Globally Harmonized System within the United States (GHS).

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms







GHS05 GHS07 GHS08

#### · Signal word Danger

### · Hazard-determining components of labelling:

1,4-dihydroxybenzene

sodium hydroxide

Aluminium sulfate hydrate

#### · Hazard statements

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

#### · Precautionary statements

P261 Avoid breathing mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

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· Additional information:

EUH031 Contact with acids liberates toxic gas.

- · Hazard description:
- · WHMIS-symbols:

D2B - Toxic material causing other toxic effects

E - Corrosive material



· NFPA ratings (scale 0 - 4)



Health = 3Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = \*3

Fire = 0

- \* Indicates a long term health hazard from repeated or prolonged exposures.
- · HMIS Long Term Health Hazard Substances

None of the ingredients are listed.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.

# **SECTION 3: Composition/information on ingredients**

- · 3.2 Mixtures
- · **Description**: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 7757-83-7	sodium sulphite	10-25%
EINECS: 231-821-4	R31	
CAS: 1310-73-2	sodium hydroxide	2,5-10%
EINECS: 215-185-5	<u>□</u> C R35	
Index number: 011-002-00-6		
(Contd. on page 4		

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	(Con	td. of page 3)
CAS: 123-31-9	1,4-dihydroxybenzene	≤ 2,5%
EINECS: 204-617-8	Xn R22-40-68; Xi R41; Xi R43; N R50	
Index number: 604-005-00-4	Xn Ř22-40-68; Xi R41; Xi R43; N R50 Carc. Cat. 3, Muta. Cat. 3	
	<b>&amp;</b> Muta. 2, H341; Carc. 2, H351	
	Aquatic Acute 1, H400	
	Acute Tox. 4, H302; Skin Sens. 1, H317	
CAS: 56-81-5	glycerol	≤ 2,5%
EINECS: 200-289-5	substance with a Community workplace exposure limit	
CAS: 17927-65-0	Aluminium sulfate hydrate	≤ 2,5%
EC number: 605-852-2	<b>★</b> Xi R41	

### · Additional information:

For the listed ingredients, the identity and exact percentages are being withheld as a trade secret. For the wording of the listed risk phrases refer to section 16.

# **SECTION 4: First aid measures**

- · 4.1 Description of first aid measures
- · **General information**: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately rinse with water.

If skin irritation or rash occurs: Get medical advice/attention.

Seek immediate medical help for blistering or open wounds.

#### · After eye contact:

Protect unharmed eye.

Remove contact lenses if worn, if possible.

Rinse opened eye for several minutes under running water. Then consult a doctor.

### · After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

### · 4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions

Strong caustic effect on skin and mucous membranes.

Danger of severe eye injury.

Gastric or intestinal disorders when ingested.

Nausea in case of ingestion.

#### · Hazards

Danger of gastric perforation.

Causes serious eye damage.

Suspected of causing genetic defects.

Suspected of causing cancer.

May cause sensitisation by inhalation and skin contact.

# • 4.3 Indication of any immediate medical attention and special treatment needed Medical supervision for at least 48 hours.

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Contains 1,4-dihydroxybenzene. May produce an allergic reaction.

# **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: None.
- · 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information No further relevant information available.

### **SECTION 6: Accidental release measures**

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Particular danger of slipping on leaked/spilled product.

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Send for recovery or disposal in suitable receptacles.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

# **SECTION 7: Handling and storage**

· 7.1 Precautions for safe handling

Use only in well ventilated areas.

Prevent formation of aerosols.

- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in cool, dry place.

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: steel.

Unsuitable material for receptacle: glass or ceramic.

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Provide alkali-resistant floor.

Provide ventilation for receptacles.

Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with acids.

Store away from metals.

- · Further information about storage conditions: Keep container tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

# **SECTION 8: Exposure controls/personal protection**

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:			
1310-73-2 so	1310-73-2 sodium hydroxide		
PEL (USA)	Long-term value: 2 mg/m <sup>3</sup>		
REL (USA)	Ceiling limit: 2 mg/m³		
TLV (USA)	Ceiling limit: 2 mg/m³		
EL (Canada)	Ceiling limit: 2 mg/m³		
EV (Canada)	Ceiling limit: 2 mg/m³		
123-31-9 1,4-dihydroxybenzene			
PEL (USA)	Long-term value: 2 mg/m³		
REL (USA)	Ceiling limit: 2* mg/m³ *15-min		
TLV (USA)	Long-term value: 1 mg/m³ DSEN		
EL (Canada)	Long-term value: 1 mg/m³ S		
EV (Canada)	Long-term value: 2 mg/m³		
56-81-5 glycerol			
PEL (USA)	Long-term value: 15* 5** mg/m³ mist; *total dust **respirable fraction		
TLV (USA)	TLV withdrawn-insufficient data human occup. exp.		
EL (Canada)	Long-term value: 10* 3** mg/m³ *mist; **mist, resirable		
EV (Canada)	Long-term value: 10 mg/m³		
• DNFI s No further relevant information available			

- · DNELs No further relevant information available.
- · PNECs No further relevant information available.
- · Additional information: The lists valid during the making were used as basis.

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- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· Respiratory protection:

Not required under normal conditions of use.

Use suitable respiratory protective device when high concentrations are present.

For large spills, respiratory protection may be advisable.

· Protection of hands:



Protective gloves

### Rubber gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

#### · Material of gloves

Nitrile rubber, NBR

Neoprene gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

## · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- · Not suitable are gloves made of the following materials: PVA gloves
- · Eye protection:



Safety glasses

- · Body protection: Alkaline resistant protective clothing
- · Limitation and supervision of exposure into the environment Avoid release to the environment.
- · Risk management measures

See Section 7 for additional information.

No further relevant information available.

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### **SECTION 9: Physical and chemical properties**

- · 9.1 Information on basic physical and chemical properties
- · General Information

· Appearance:

Form: Liquid
Colour: Opaque
Odour: Characteristic
Odour threshold: Not determined.

• pH-value at 20 °C (68 °F): 13

· Change in condition

Melting point/Melting range:
Boiling point/Boiling range:
Undetermined.

Flash point:
Flammability (solid, gaseous):
Auto/Self-ignition temperature:
Not applicable.
Not determined.
Not determined.

• **Self-igniting:** Product is not self-igniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

· Vapour pressure: Not determined.

• Density at 20 °C (68 °F): 1,16 g/cm³ (9,68 lbs/gal)

Relative density
 Vapour density
 Evaporation rate
 Not determined.
 Not determined.

· Solubility in / Miscibility with

water: Fully miscible.Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

**Dynamic:** Not determined. **Kinematic:** Not determined.

• 9.2 Other information No further relevant information available.

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## **SECTION 10: Stability and reactivity**

- · 10.1 Reactivity
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

Strong exothermic reaction with acids.

Corrosive action on metals.

Reacts with fats and oils.

Reacts with oxidising agents.

- · 10.4 Conditions to avoid Avoid acids.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Sulphur oxides (SOx)

Nitrogen oxides (NOx)

## **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity:

<ul> <li>LD/LC50 values relevant f</li> </ul>	for classification:
---	---------------------

## 1310-73-2 sodium hydroxide

Oral LD50 2000 mg/kg (rat)

#### 123-31-9 1,4-dihydroxybenzene

Oral LD50 320 mg/kg (rat)

- Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- · Sensitisation: Sensitisation possible through skin contact.
- · Subacute to chronic toxicity: Suspected of causing cancer.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Corrosive

Irritant

Danger through skin adsorption.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Toxic and/or corrosive effects may be delayed up to 24 hours.

Suspected of causing genetic defects.

Contains 1,4-dihydroxybenzene. May produce an allergic reaction.

· Acute effects (acute toxicity, irritation and corrosivity): May cause an allergic skin reaction.

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· Repeated dose toxicity:

May cause damage to organs through prolonged or repeated exposure. Repeated exposures may result in skin and/or respiratory sensitivity.

Limited evidence of a carcinogenic effect.

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):

Muta. 2, Carc. 2

## **SECTION 12: Ecological information**

- · 12.1 Toxicity
- · Aquatic toxicity: Toxic for aquatic organisms
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark:

Very toxic for fish

Toxic for algae

- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. If the dilution of the use-level pH-value is considerably reduced, the aqueous waste, emptied into drains, is only low water-dangerous.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

### **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

### **SECTION 14: Transport information**

- · 14.1 UN-Number
- · DOT, ADR, IMDG, IATA

UN1719

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Trade name: SDP-α EDVL alpha Violet Eco Developer

· 14.2 UN proper shipping name

(Contd. of page 10)



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 5 L (1.3 gal).

· **DOT, IATA**Caustic alkali liquids, n.o.s. (Sodium hydroxide)

· ADR, IMDG 1719 CAUSTIC ALKALI LÌQUID, N.O.S. (SODIUM

HYDROXIDE)

· 14.3 Transport hazard class(es)

· DOT



· Class 8 Corrosive substances.

· Label 8

· ADR



· Class 8 (C5) Corrosive substances.

· Label 8

· IMDG, IATA



· Class 8 Corrosive substances.

Label14.4 Packing group

· DOT, ADR, IMDG, IATA

Ш

· 14.5 Environmental hazards:

14.5 Environmental nazarus.

· Marine pollutant: No

• 14.6 Special precautions for user Warning: Corrosive substances.

Danger code (Kemler):
 EMS Number:
 Segregation groups
 Alkalis

· 14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· ADR

Limited quantities (LQ)Excepted quantities (EQ)5LCode: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml (Contd. on page 12)

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Transport category
Tunnel restriction code

IMDG
Limited quantities (LQ)
Excepted quantities (EQ)

UN "Model Regulation":

(Contd. of page 11)

3

Code: E1

Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
UN1719, CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE), 8, III

# **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 355 (extremely hazardous substances):

123-31-9 1,4-dihydroxybenzene

· Section 313 (Specific toxic chemical listings):

123-31-9 1,4-dihydroxybenzene

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65 (California):
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

- · Carcinogenic Categories
- · EPA (Environmental Protection Agency)

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer)

123-31-9 1,4-dihydroxybenzene

3

· TLV (Threshold Limit Value established by ACGIH)

123-31-9 1,4-dihydroxybenzene

A3

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

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· Canada

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

7758-02-3 potassium bromide

· Canadian Ingredient Disclosure list (limit 1%)

1310-73-2 sodium hydroxide

123-31-9 1,4-dihydroxybenzene

· Other regulations, limitations and prohibitive regulations

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

R22 Harmful if swallowed.

R31 Contact with acids liberates toxic gas.

R35 Causes severe burns.

R40 Limited evidence of a carcinogenic effect.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

R50 Very toxic to aquatic organisms.

R68 Possible risk of irreversible effects.

### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Met. Corr.1: Corrosive to metals, Hazard Category 1

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Muta. 2: Germ cell mutagenicity, Hazard Category 2

Carc. 2: Carcinogenicity, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

#### · Sources

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