Mitsubishi Imaging (MPM), Inc.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

GHS Product Identifier	**SDP – a EDVL apha Violet Eco Developer**
Product Code	**SDP – a EDVL**
Chemical Name	Mixture
Trade name	**SDP – a EDVL apha Violet Eco Developer**
CAS No.	Mixture
EINECS No.	Mixture
REACH Registration No.	Not available

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

Identified use(s)	Users are recommended to seek further advice.
Uses advised against	Users are recommended to seek further advice.

1.3 Supplier's details

Company Identification	**Mitsubishi Imaging (MPM), Inc.**
Address	**555 Theodore Fremd Avenue, Rye, NY 10580 USA**
Telephone	**(914) 925-3200**
E-Mail (competent person)	

1.4 Emergency telephone number – ChemTrec
Emergency Phone No. (800) 424-9300 (US/Canada), +01 (703) 527-3887 (Elsewhere)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP) – Skin Corrosion 1B, Eye Damage 1, Skin Sensitizer 1, Mutagen 2, Carcinogen 2 Environment Acute 1 (3.2/1B, 3.3/1, 3.4/1, 3.5/2, 3.6/2, 4.1/1)

2.1.2 Directive 67/548/EEC & Directive 1999/45/EC – Corrosive, Harmful, Environment

2.2 Label elements

2.2.1 Label elements ***According to Regulation (EC) No. 1272/2008 (CLP)***

GHS Product Identifier **(**EU**)**

Hazard pictogram(s)

Signal word(s) **Danger**

Hazard statement(s)
H314: Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341: Suspected of causing genetic defects.
H351: Suspected of causing cancer.
H400: Very toxic to aquatic life.
EUH031: Contact with acids liberates toxic gas.

Precautionary Statement(s)
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P311: If exposed or if you feel unwell: Call a POISON CENTRE or doctor/physician..

2.2.2 Label elements ***According to Directive 67/548/EEC & Directive 1999/45/EC***

Hazard Symbol

Risk Phrases
R31: Contact with acids liberates toxic gas.
R35 Causes severe burns.
R40: Limited evidence of a carcinogenic effect.
R43: May cause sensitization by skin contact.
R50: Very toxic to aquatic organisms.
R68: Possible risk of irreversible effects.

Safety Phrases S24/25: Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S27/28: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of: Cool water.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other hazards **Hazardous under OSHA Hazard Communication Standard (USA)**

HMIS: Health-2, Flammability- 0 Reactivity – 0
GHS Classification (USA): 3.2/1A, 3.3/1,3.6/2.
Corrosive, Suspect carcinogen.
H314: Causes severe skin burns and eye damage.
H351: Suspected of causing cancer.
P280: Wear protective gloves/protective clothing/eye protection/face 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.
P307 + P311: If exposed: Call a POISON CENTRE or doctor/physician.

WHMIS Classification (Canada): Class D2A – Material With Other Toxic effects. Class E - Corrosive Material

H314: Causes severe skin burns and eye damage.
H351: Suspected of causing cancer.
P280: Wear protective gloves/protective clothing/ eye protection/face 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.
P307 + P311: If exposed: Call a POISON CENTRE or doctor/physician.

2.4 Additional Information

Potential Health Effects

Inhalation	May cause irritation.
Eye Contact	Causes severe burns.
Skin Contact	Causes skin burns.
Ingestion	Causes severe burns. Danger of very serious irreversible effects.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

EC Classification No. 1272/2008/EC

Hazardous ingredient(s)	% W/W	CAS No.	EC No.	REACH Registration No.	Hazard pictogram(s) and Hazard statement(s)	
Sodium Hydroxide	1-5	1310-73-2	215-185-5	NA		3.2/1A, 3.3/1; H314
Sodium Sulfite	10-15	7757-83-7	231-821-4	NA	None	EUH031
Hydroquinone	1-5	123-31-9	204-617-8	NA		3.1/4, 3.3/1, 3.4/1,3.5/2, 3.6/2, 4.1/1; H302, H317, H318, H341, H351, H400

EC Classification No. 67/548/EEC

Hazardous ingredient(s)	% W/W	CAS No.	EC No.	REACH Registration No.	EC Classification and Risk Phrases	
Sodium Hydroxide	1-5	1310-73-2	215-185-5	NA		C; R35
Sodium Sulfite	10-15	7757-83-7	231-821-4	NA	None	None; R31
Hydroquinone	1-5	123-31-9	204-617-8	NA		Xn,N; R22, R40, R41,R43,R50,R68

3.3 Additional Information

- For full text of H/P phrases see section 16. For full text of R phrases see section 16. Non-Hazardous ingredients are not listed and make up the balance of the product.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Remove patient from exposure. Keep patient at rest and give oxygen if breathing difficult. If symptoms develop, obtain medical attention.
Skin Contact	Wash affected skin with soap and water. If symptoms develop, obtain medical attention.
Eye Contact	Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.
Ingestion	Do not induce vomiting. Obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed — **Acute:** Causes burns to skin and eyes. Vapour may be irritant to the respiratory tract. Ingestion may cause irritation of the gastrointestinal tract. **Delayed and chronic effects:** Generally similar to acute exposures. Hydroquinone: Possibly carcinogenic to humans.

4.3 Indication of the immediate medical attention and special treatment needed — Exposure by any route should be treated symptomatically by medical personnel.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	Carbon Dioxide, water, water fog, dry chemical, chemical foam.
Unsuitable Extinguishing Media	None

5.2 Special hazards arising from the substance or mixture — Products of combustion include compounds of carbon, hydrogen, oxygen, nitrogen and sulfur, including Carbon Monoxide.

5.3 Advice for fire-fighters — A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool with water spray to prevent container rupture due to steam buildup;

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures — Ensure full personal protection (including respiratory protection) during removal of spillages.

6.2 Environmental precautions — Do not let undiluted product enter drains.

6.3 Methods and material for containment and cleaning up — Rinse small spills to sewers with copious quantities of water. Confine large spills; either use vacuum gear or inert absorbent such as clay. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections — See Also Section 7, 8, 13.

6.5 Additional Information — Environmental hazards cannot be excluded by inappropriate handling or disposal

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling — All employees who handle this material should be trained to handle it safely. Wear suitable protective clothing and eye/face protection. Avoid all contact.

7.2 Conditions for safe storage, including any incompatibilities — Attacks many metals. Store at ambient termperatures. Store in a closed container. Store in a well-ventilated place. Keep/store away from: Strong acids, metals.

Storage Temperature	Ambient temperatures.
Storage Life	Not available. Keep containers properly sealed when not in use.
Incompatible materials	Strong acids, metals.

7.3 Specific end use(s) — Consult the supplier.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note:
Sodium hydroxide	1310-73-2	NE	2 (Ceiling)	NE	NE	OSHA
		NE	2 (Ceiling)	NE	NE	ACGIH
Sodium sulfite	7757-83-7	NE	NE	NE	NE	OSHA
		NE	NE	NE	NE	ACGIH
Hydroquinone	123-31-9	NE	2	NE	2	OSHA
		NE	1	NE	NE	ACGIH

8.1.2 Biological limit value

Biological limit values are not available for this product

8.1.3 PNECs and DNELs

No PNECs and/or DNELs are available for this product.

8.2 Exposure controls

8.2.1 Appropriate engineering controls Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.

8.2.2 Personal protection equipment

Eye/face protection — Safety spectacles.

Skin protection (Hand protection/ Other) — Plastic or synthetic rubber gloves. Wear chemical resistant apron.

Respiratory protection — Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely.

Thermal hazards — None

8.2.3 Environmental Exposure Controls Adequate ventilation must be used.

HMIS Personal Protective Equipment Letter Designation C

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear Liquid	Colour	Yellowish
Odour	Odorless	Odour Threshold (ppm)	Not available
Melting Point (°C) / Freezing Point (°C)	Not available	Boiling point/boiling range (°C):	212°F (100°C)
Flash Point (°C)	Not Flammable	Explosive limit ranges	Not available
Auto Ignition Temperature (°C)	Not available	Decomposition Temperature (°C)	Not available
Explosive properties	Not available	Oxidising properties	Not available
Flammability (solid, gas)	Not available	pH (Value)	12.5-13.0
Evaporation rate	<1	Vapour Pressure (mm Hg)	17mm Hg @20°C
Vapour Density (Air=1)	>1	Density (g/ml)	1.140 ± 0.005
Solubility (Water)	Miscible.	Solubility (Other)	Not available
Partition Coefficient (n-Octanol/water)	Not available	Viscosity (mPa.s)	Not specified.

9.2 Other information Volatile Organic Compound (VOC) Content: 53 g / L per EPA Method 24 (does not include water). VOC weight %: <5% (calc) per California CARB methodology.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity Stable

10.2 Chemical stability Stable under normal conditions.

10.3 Possibility of hazardous reactions Can react violently if in contact with - strong acids, metals.

10.4 Conditions to avoid Extreme temperatures

10.5 Incompatible materials strong acids, metals

10.6 Hazardous Decomposition Product(s) Oxides of carbon, sulfur, nitrogen , hydrocarbons, fumes, smoke.

SECTION 11: TOXICOLOGICAL INFORMATION

Ingredient	CAS No.	LD_{50} (Oral, Rat)	LC_{50} (Inhalation, Rat)
Sodium Hydroxide	1310-73-2	No data	No data
Sodium Sulfite	7757-83-7	3560mg/kg	5500mg/m3
Hydroquinone	123-31-9	302 mg/kg	No data

11.1 Information on toxicological effects

11.1.2 Mixtures

Acute toxicity	Corrosive to gastrointestinal tract.
Irritation	Causes severe damage to eyes and skin.
Corrosivity	Corrosive to skin and eyes.
Sensitisation	May cause allergic skin reactions.
Repeated dose toxicity	Similar to acute exposures.
Carcinogenicity	Hydroquinone has shown limited evidence of carcinogenicity in animal studies.
Mutagenicity	Hydroquinone has shown evidence of mutagenicity in animal studies.
Toxicity for reproduction	No data

11.2 Other information Limit exposure to product by wearing Personal Protective Equipment (PPE). See Section 8 for PPE requirements.

SECTION 12: ECOLOGICAL INFORMATION

12.1	**Toxicity**	Very toxic to aquatic life in un diluted form.
12.2	**Persistence and degradability**	Readily biodegradable.
12.3	**Bioaccumulative potential**	Slight.
12.4	**Mobility in soil**	No data.
12.5	**Results of PBT and vPvB assessment**	No data.
12.6	**Other adverse effects**	Do not release undiluted to the sewer.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	**Waste treatment methods**	Do not empty into drains; dispose of this material and its container in a safe way. Send to a licensed recycler, reclaimer or incinerator. Avoid release to the environment. Decontaminate empty containers before recycling.
13.2	**Additional Information**	None

SECTION 14: TRANSPORT INFORMATION

Land transport (ADR/RID) (a)(c)

UN number	UN 1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Transport hazard class(es)	8
Packing Group	III
Hazard label(s)	Corrosive
Environmental hazards	None
Special precautions for user	None

Land transport (Within USA) (b)(c)

UN number	UN 1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Transport hazard class(es)	8
Packing Group	III
Hazard label(s)	Corrosive
Environmental hazards	None
Special precautions for user	None

Sea transport (IMDG) (a)(c)

UN number	UN 1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Transport hazard class(es)	8
Packing Group	III
Marine Pollutant	Yes, for > 5 Liters
Special precautions for user	None

Air transport (ICAO/IATA) (a)(c)

UN number	UN 1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Transport hazard class(es)	8
Packing Group	III
Environmental hazards	No
Special precautions for user	None

(a)– Consult with transport provider. Full shipping name: Corrosive liquid, n.o.s. (sodium hydroxide, hydroquinone).
(b)- ORM-D may be applicable within the USA for package sizes less than 30 kg until 2014.
(c)– Check relevant regulations for Special Provisions.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

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

15.1.1 EU regulations

Authorisations and/or restrictions on use	Consult the supplier.
European Union (EINECS/ELINCS)	Referenced.
WGK number	3

15.1.2 National regulations

USA

TSCA (Toxic Substance Control Act)	All chemicals listed
SARA 311/312 - Hazard Categories	Acute Health Hazard, Chorinic Health Hazard
SARA 302 - Extremely Hazardous Substances	Listed –Hydroquinone
SARA 313 - Toxic Chemicals	Listed –Hydroquinone
CERCLA (Comprehensive Environmental Response Compensation and Liability Act)	RQ = 3000lbs (1360 kg) for product as hydroquinone.
CAA (Clean Air Act 1990)	Listed – None.
CWA (Clean Water Act)	Listed – None.
State Right to Know Lists	Listed – MA, NJ, PA
Proposition 65 (California)	Listed – None

Canada

WHMIS Classification	D2A – Material with other Toxic Effects. E – Corrosive Material.
Canada (DSL/NDSL)	Listed on DSL
Canada Ingredient Disclosure List (CIDL)	Listed – Hydroquinone

15.2 Chemical Safety Assessment: Corrosive to all tissues. Corrosive to metals. Toxic to aquatic life in

undiluted form.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

LEGEND

ACGIH	American Conference of Governmental Industrial Hygienists	NA	not applicable, not available
AICS	Australian Inventory of Chemical Substances	NIOSH	National Institute for Occupational Safety and Health
ANSI	American National Standards Institute	ND	not determined
atm	atmosphere (pressure unit)	NFPA	National Fire Prevention Association
BOD	biological oxygen demand	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OC	open cup
CC	closed cup	OSHA	Occupational Safety and Health Administration
CDTA	Chemical Drug and Trafficking Act	Part	partition
COC	Cleveland Open Cup	PEL	permissible exposure limits
COD	chemical oxygen demand	ppb	parts per billion
coeff.	coefficient	PPE	personal protective equipment
CFR	Code of Federal Regulations	ppm	parts per million
CPR	cardio-pulmonary resuscitation	psi	pounds per square inch
DEA	Drug Enforcement Agency	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	RQ	Reportable quantity
DSCL	Dangerous Substances Classification and Labeling	RTK	Right to Know
EEC	European Economic Community	SARA	Superfund Amendments and Reauthorization Act
FDA	Food and Drug Administration	STEL	short-term exposure limit
HMIS	Hazardous Materials Information System	SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons (Australia)
IARC	International Agency for Research on Cancer	TCC	Tagliabue Closed Cup
IDLH	immediate danger to life or health	TDG	Transportation of Dangerous Goods
kg	kilogram	TPQ	threshold planning quantity
L	liter	TQ	threshold quantity
LC50	median lethal concentration	TSCA	Toxic Substances Control Act
LD50	median lethal dose	TWA	time-weighted average
LEL	lower explosive limit	UEL	upper explosive limit
mg	milligram	WES	Workplace Exposure Standard (New Zealand)
mL	milliliter	WHMIS	Workplace Hazardous Material Information System

References: RTECS, CAS Registry, EINECS/ESIS, *Casarett & Doull's Toxicology*, *Goldfranks's Toxicological Emergencies*, Manufacturer Information

Risk Phrases and Safety Phrases

R22: Harmful if swallowed.
R31 Contact with acids liberates toxic gas.
R35 Causes severe burns.
R37/38 Irritating to respiratory system and skin.
R40: Limited evidence of a carcinogenic effect.
R41 Risk of serious damage to eyes.
R43: May cause sensitization by skin contact.
R50: Very toxic to aquatic organisms.
R68: Possible risk of irreversible effects.

Hazard statement(s) and Precautionary statement(s)

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.
EUH031 Contact with acids liberates toxic gas.

Training advice: None

Additional Information: Ingredient names for labeling purposes (CAS #) - Water (7732-18-5), Sodium Sulfite (7757-83-7), Hydroquinone (123-31-9), Sodium Hydroxide (1310-73-2), Glycerol (56-81-5)

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.