





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

- 1.1 Product identifier**
 GHS Product Identifier **Mitsubishi SDP - α Violet Gum**
 Product Code **SDP - αVGM**
 Chemical Name **Mixture, Finishing solution for SDP - α System**
 Trade name **Mitsubishi SDP - α Violet Gum**
 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) – Acute toxicity 4 (Oral), Skin irritation 2, Eye Irritation 2 (3.1/4, 3.2/2, 3.3/2)
2.1.2 Directive 67/548/EEC & Directive 1999/45/EC –Harmful
- 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) **Warning**
 Hazard statement(s) **H302: Harmful if swallowed**
H315 Causes skin irritation.
H319: Causes serious eye irritation
 Precautionary Statement(s) **P281: Use personal protective equipment as required.**
P301 + P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.
- 2.2.2 Label elements According to Directive 67/548/EEC & Directive 1999/45/EC**
 Hazard Symbol 
 Risk Phrases **R22: Harmful if swallowed**
R36/38: Irritating to eyes and skin.
 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.
S36: Wear suitable protective clothing.
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): Irritant (Eyes, Skin). 
 H302: Harmful if swallowed.
 H315: Causes skin irritation.
 H320: Causes eye irritation.
 P281: Use personal protective equipment as required.

P301 + P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

WHMIS Classification (Canada): D2B - Toxic material causing other toxic effects. Irritant.

H302: Harmful if swallowed

H315: Causes skin irritation.

H319: Causes serious eye irritation.

P281: Use personal protective equipment as required.

P301 + P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.



2.4 Additional Information

Potential Health Effects

Inhalation

May cause irritation

Eye Contact

Causes moderate or serious eye irritation.

Skin Contact

May cause irritation. Repeated or prolonged skin exposure may cause dermatitis.

Ingestion

Ingestion of large quantities may result in blood disorders resulting in organ damage. Product is a gastro-intestinal irritant.

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)
Monoammonium Phosphate	3-7	7722-76-1	231-764-5	NA	None None
Phosphoric Acid	1-5	7664-38-2	231-633-2	NA	3.2/1B, H314
Sodium Nitrate	1-5	7631-99-4	231-554-3	NA	2.14/3, 3.1/4, 3.2/2, 3.3/2, 3.8/3; H272, H302, H315, H319, H335,
2-(Methylamino) Ethanol	1-5	109-83-1	203-710-0	NA	3.1/4, 3.2/1B; H302, H312, H314

EC Classification No. 67/548/EEC

Hazardous ingredient(s)	% W/W	CAS No.	EC No.	REACH Registration No.	EC Classification and Risk Phrases
Monoammonium Phosphate	3-7	7722-76-1	231-764-5	NA	Xi, R36/37
Phosphoric Acid	1-5	7664-38-2	231-633-2	NA	C, R22, R34
Sodium Nitrate	1-5	7631-99-4	231-554-3	NA	O, Xn, R8, R22, R36/37/38
2-(Methylamino) Ethanol	1-5	109-83-1	203-710-0	NA	C, R21/22, R34

3.3 Additional Information

- For full text of H 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	Remove contact lenses. 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:** Liquid product is irritant to eyes and skin.
Delayed and chronic effects: Liver and kidney damage, mild dermatitis.
- 4.3 Indication of the immediate medical attention and special treatment needed** Treat symptomatically; ingestions may require patient monitoring to include diagnostic testing.

SECTION 5: FIRE-FIGHTING MEASURES

- 5.1 Extinguishing media**
Suitable Extinguishing Media Non-combustible.
Unsuitable Extinguishing Media None
- 5.2 Special hazards arising from the substance or mixture** None.
- 5.3 Advice for fire-fighters** A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

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 product enter drains.
- 6.3 Methods and material for containment and cleaning up** Soak up with inert absorbent material and dispose accordingly. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections** See Also Section 7, 8, 13.
- 6.5 Additional Information** Material is acidic and will irritate the eyes if product is allowed to directly contact the eyes. Wash small spills to sanitary sewer.
Large spills -
confine spill, soak up with approved absorbent, shovel product into approved container for 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 contact with eyes. Avoid ingestion.
- 7.2 Conditions for safe storage, including any incompatibilities** Store at ambient temperatures. Store in a closed container. Store in a well-ventilated place. Keep/store away from: Strong acids, Strong bases and oxidizers.
- Storage Temperature Ambient temperatures
Storage Life Not available
Incompatible materials Strong oxidizing agents, Strong acids/bases.
- 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/m ³)	STEL (ppm)	STEL (mg/m ³)	Note:
Monoammonium Phosphate	7722-76-1	NE	NE	NE	NE	OSHA
		NE	NE	NE	NE	ACGIH
Phosphoric Acid	7664-38-2	NE	1	NE	3	OSHA
		NE	1	NE	3	ACGIH
Sodium Nitrate	7631-99-4	NE	NE	NE	NE	OSHA
		NE	NE	NE	NE	ACGIH
2-(Methylamino) Ethanol	109-83-1	NE	NE	NE	NE	OSHA
		NE	NE	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)Neoprene gloves, butyl or nitrile rubber gloves with cuffs.
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

Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.

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	Colorless
Odour	Slight Amine	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)	5.2± 0.2
Evaporation rate	<1	Vapour Pressure (mm Hg)	17mm Hg @20°C
Vapour Density (Air=1)	>1	Density (g/ml)	1.092 ± 0.005 @25°C
Solubility (Water)	Complete	Solubility (Other)	Not available
Partition Coefficient (n-Octanol/water)	Not available	Viscosity (mPa.s)	Like water

9.2 Other information Volatile Organic Compound (VOC) Content: 55 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** None
- 10.2 Chemical stability** Stable under normal conditions.
- 10.3 Possibility of hazardous reactions** Can react violently if in contact with - strong acids, oxidizers.
- 10.4 Conditions to avoid** Extreme temperatures
- 10.5 Incompatible materials** Strong oxidizers, strong acids
- 10.6 Hazardous Decomposition Product(s)** Oxides of carbon, Oxides of Nitrogen, hydrocarbons, fumes, smoke.

SECTION 11: TOXICOLOGICAL INFORMATION

Ingredient	CAS No.	LD ₅₀ (Oral, Rat)	LC ₅₀ (Inhalation, Rat)
Monoammonium Phosphate	7722-76-1	5,750 mg/kg	No Data
Phosphoric Acid	7664-38-2	No Data	No Data
Sodium Nitrate	7631-99-4	1267 mg/kg	No Data
2-(Methylamino) Ethanol	109-83-1	1391 mg/kg	No Data

11.1 Information on toxicological effects**11.1.2 Mixtures**

- Acute toxicity Harmful if swallowed. Will cause irritation of the gastrointestinal tract.
- Irritation Eye irritant, skin irritant.
- Corrosivity Slight.
- Sensitisation No data.
- Repeated dose toxicity No data
- Carcinogenicity None of the components present in this formulation at concentrations equal to or greater than 0.1% are listed by the IARC, NTP or OSHA as a carcinogen.
- Mutagenicity Not to be expected.
- Toxicity for reproduction Not generally expected, except in ingestions of large quantities.

11.2 Other information

None

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	May cause harm to aquatic environment through the presence of phosphates and nitrates. Avoid discharge into bodies of water.
12.2 Persistence and degradability	Biodegradable.
12.3 Bioaccumulative potential	The product has low potential for bioaccumulation.
12.4 Mobility in soil	Based on the components of this product, it is expected to have high mobility in soil.
12.5 Results of PBT and vPvB assessment	No data.
12.6 Other adverse effects	Environmental hazards cannot be excluded by inappropriate handling or disposal.

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)(b)**

UN number	Not hazardous for transport
Proper Shipping Name	Not hazardous for transport
Transport hazard class(es)	Not hazardous for transport
Packing Group	Not hazardous for transport
Hazard label(s)	Not hazardous for transport
Environmental hazards	Not hazardous for transport
Special precautions for user	Not hazardous for transport

Land transport (Within USA) (a)(b)

UN number	Not hazardous for transport
Proper Shipping Name	Not hazardous for transport
Transport hazard class(es)	Not hazardous for transport
Packing Group	Not hazardous for transport
Hazard label(s)	Not hazardous for transport
Environmental hazards	Not hazardous for transport
Special precautions for user	Not hazardous for transport

Sea transport (IMDG) (a)(b)

UN number	Not hazardous for transport
Proper Shipping Name	Not hazardous for transport
Transport hazard class(es)	Not hazardous for transport
Packing Group	Not hazardous for transport
Marine Pollutant	Not hazardous for transport
Special precautions for user	Not hazardous for transport

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

UN number	Not hazardous for transport
Proper Shipping Name	Not hazardous for transport
Transport hazard class(es)	Not hazardous for transport
Packing Group	Not hazardous for transport
Environmental hazards	Not hazardous for transport
Special precautions for user	Not hazardous for transport

(a)– Consult with transport provider.

(b)– 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
European Union (EINECS/ELINCS)
WGK number

Consult the supplier.
Referenced.
2

15.1.2 National regulations**USA**

TSCA (Toxic Substance Control Act)
SARA 311/312 - Hazard Categories
SARA 302 - Extremely Hazardous Substances
SARA 313 - Toxic Chemicals
CERCLA (Comprehensive Environmental Response
Compensation and Liability Act)
CAA (Clean Air Act 1990)
CWA (Clean Water Act)
State Right to Know Lists
Proposition 65 (California)

All chemicals listed
Acute Health Hazard.
Listed – None.
Listed – None
Listed – None

Listed – None.
Listed – None.
Listed – MA, NJ, PA
Listed – None

Canada

WHMIS Classification
Canada (DSL/NDSL)
Canada Ingredient Disclosure List (CIDL)

D2B – Toxic material causing other toxic effects.
Listed – DSL
Listed – None

15.2 Chemical Safety Assessment: Harmful if swallowed, Irritant (to eyes).

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*, *Goldfrank's Toxicological Emergencies*, Manufacturer Information

Risk Phrases and Safety Phrases

R8: Contact with combustible material may cause fire.
 R22: Harmful if swallowed
 R34: Causes burns.
 R36/37/38: Irritating to eyes, respiratory system and skin.
 R41: Risk of serious damage to eyes.

Hazard statement(s) and Precautionary statement(s)

H272 May intensify fire; oxidiser.
 H302: Harmful if swallowed
 H312: Harmful in contact with skin.
 H314: Causes severe skin burns and eye damage
 H315 Causes skin irritation.
 H319: Causes serious eye irritation

Training advice: None

Additional Information: Ingredient names for labeling purposes (CAS #) - Water (7732-18-5), Monoammonium Phosphate (7722-76-1), Phosphoric Acid (7664-38-2), Sodium Nitrate (7631-99-4), 2-(Methylamino)Ethanol (109-83-1)

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.