Printing date 05.05.2015 Revision: 05.05.2015

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

- · 1.1 Product identifier
- · Trade name: SLM-OA2 Fountain Solution Additive
- · 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

STOT RE 2 H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

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



Xn; Harmful

Harmful: danger of serious damage to health by prolonged exposure if swallowed.

· 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

(Contd. on page 2)

Printing date 05.05.2015 Revision: 05.05.2015

Trade name: SLM-OA2 Fountain Solution Additive

(Contd. of page 1)

- · 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



GHS08

- · Signal word Warning
- Hazard-determining components of labelling: ethanediol
- · Hazard statements

H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

· Precautionary statements

P260 Do not breathe mist/vapours/spray.

P301+P310 IF SWALLOWED: Immediately call a doctor. P314 Get medical advice/attention if you feel unwell.

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

regulations.

- · Hazard description:
- · WHMIS-symbols:

D2A - Very toxic material causing other toxic effects



· NFPA ratings (scale 0 - 4)



Health = 2 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



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

None of the ingredients are listed.

(Contd. on page 3)

Printing date 05.05.2015 Revision: 05.05.2015

Trade name: SLM-OA2 Fountain Solution Additive

(Contd. of page 2)

- · 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.

| • | Danger | ous | com | pon | ents: |
|---|--------|-----|-----|-----|-------|
|---|--------|-----|-----|-----|-------|

CAS: 107-21-1 ethanediol Xn R22-48/22 2,5-10% STOT RE 2, H373 Acute Tox. 4, H302

· 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: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

· After eye contact:

Protect unharmed eye.

Remove contact lenses if worn, if possible.

Rinse opened eye for several minutes under running water. If symptoms persist, 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

Breathing difficulty

Coughing

Dizziness

Gastric or intestinal disorders when ingested.

Disorientation

Nausea in case of ingestion.

Unconsciousness

Acidosis

· Hazards

Danger of impaired breathing.

Danger of cerebral oedema.

May cause neurotoxic effects.

(Contd. on page 4)

Printing date 05.05.2015 Revision: 05.05.2015

Trade name: SLM-OA2 Fountain Solution Additive

(Contd. of page 3)

Danger of convulsion.

May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

• 4.3 Indication of any immediate medical attention and special treatment needed Contains ethylene glycol. Consult literature for specific antidotes.

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 Use large quantities of foam as it is partially destroyed by the product.

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 clothing.

· 6.2 Environmental precautions:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· 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.

Avoid splashes or spray in enclosed areas.

· Information about fire - and explosion protection: No special measures required.

(Contd. on page 5)

Printing date 05.05.2015 Revision: 05.05.2015

Trade name: SLM-OA2 Fountain Solution Additive

(Contd. of page 4)

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

Provide ventilation for receptacles.

- Information about storage in one common storage facility: Store away from foodstuffs.
- · 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:

107-21-1 ethanediol

IOELV (EU) Short-term value: 104 mg/m³, 40 ppm

Long-term value: 52 mg/m³, 20 ppm

Skin

TLV (USA) Long-term value: NIC-10* mg/m³

Ceiling limit: (100) mg/m³

(H);*as inhalable fraction and vapor

EL (Canada) | Short-term value: 20** mg/m³

Long-term value: 10** mg/m³
Ceiling limit: 100* mg/m³, 50*** ppm
*Aerosol; **Particulate; ***Vapour

EV (Canada) Ceiling limit: 100 mg/m³

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

Wash hands before breaks and at the end of work.

· 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:



(Contd. on page 6)

Printing date 05.05.2015 Revision: 05.05.2015

Trade name: SLM-OA2 Fountain Solution Additive

(Contd. of page 5)

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

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.

· Eye protection:



Safety glasses

· Body protection:

Not required under normal conditions of use.

Protection may be required for spills.

- · Limitation and supervision of exposure into the environment Avoid release to the environment.
- · Risk management measures See Section 7 for additional information.

SECTION 9: Physical and chemical properties

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

Form: Liquid White

Odour: Odourless

Odour threshold: Not determined.

• pH-value at 20 °C (68 °F): 8,0-9,0

· Change in condition

Melting point/Melting range: <-4 °C (<25 °F) Boiling point/Boiling range: >100 °C (>212 °F)

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

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

• **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.

(Contd. on page 7)

Printing date 05.05.2015 Revision: 05.05.2015

Trade name: SLM-OA2 Fountain Solution Additive

(Contd. of page 6)

Upper: Not determined.· Vapour pressure: Not determined.

• Density at 20 °C (68 °F): 1,1-1,2 g/cm³ (9,18-10,014 lbs/gal)

Relative density
Vapour density
Evaporation rate
Not determined.
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.

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

Reacts with strong acids.

Reacts with strong alkali.

Reacts with oxidising agents.

- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: Oxidizers, strong bases, strong acids
- · 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values relevant for classification:

107-21-1 ethanediol

Oral LD50 5840 mg/kg (rat)
Dermal LD50 9530 mg/kg (rabbit)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eve: No irritating effect.
- · Sensitisation: No sensitising effects known.

(Contd. on page 8)

Printing date 05.05.2015 Revision: 05.05.2015

Trade name: SLM-OA2 Fountain Solution Additive

(Contd. of page 7)

· 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: Causes damage to organs.

- · Acute effects (acute toxicity, irritation and corrosivity): From product as supplied: None.
- Repeated dose toxicity:

May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): None.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 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.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 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

Contact waste processors for recycling information.

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:
- \cdot Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number

· DOT, ADR, ADN, IMDG, IATA Not Regulated

· 14.2 UN proper shipping name

· DOT, ADR, ADN, IMDG, IATA Not Regulated

(Contd. on page 9)

Printing date 05.05.2015 Revision: 05.05.2015

Trade name: SLM-OA2 Fountain Solution Additive

(Contd. of page 8)

· 14.3 Transport hazard class(es)

· DOT, ADR, ADN, IMDG, IATA

· Class Not Regulated

· 14.4 Packing group

· DOT, ADR, IMDG, IATA Not Regulated

· 14.5 Environmental hazards:

· Marine pollutant: No

• 14.6 Special precautions for user Not applicable.

· 14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· UN "Model Regulation":

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):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

107-21-1 ethanediol

· 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)

7631-86-9 silicon dioxide

3

· TLV (Threshold Limit Value established by ACGIH)

107-21-1 ethanediol

A4

(Contd. on page 10)

Printing date 05.05.2015 Revision: 05.05.2015

Trade name: SLM-OA2 Fountain Solution Additive

(Contd. of page 9)

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

None of the ingredients are listed.

- · Canada
- · Canadian Domestic Substances List (DSL)

All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients are listed.

· Canadian Ingredient Disclosure list (limit 1%)

7631-86-9 silicon dioxide

107-21-1 ethanediol

· 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

H302 Harmful if swallowed.

H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure:

R22 Harmful if swallowed.

R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

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

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

Acute Tox. 4: Acute toxicity, Hazard Category 4

(Contd. on page 11)

Printing date 05.05.2015 Revision: 05.05.2015

Trade name: SLM-OA2 Fountain Solution Additive

(Contd. of page 10)

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

· Sources

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com