SAFETY DATA SHEET

1. Identification

Product identifier Fluooppi Ver.2 : Ash-hAG (Ash-MNL/MCL + hAG-MNL/MCL)
pAsh-MNL, pAsh-MCL, phAG-MNL, phAG-MCL

Other means of identification

Product code AM-8011M
Recommended use Research use only.
Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer and Manufacturer and Supplier (Asia)
Medical & Biological Laboratories (MBL) Co., Ltd. Medical & Biological Laboratories (MBL) Co., Ltd.
Supplier (Asia) 4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, Japan
Telephone number +81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)
Fax +81-52-238-1440
E-mail sds-support@mbl.co.jp
URL http://www.mbl.co.jp/e/index.html
Contact person SDS Support

Supplier MBL International Corporation
15A Constitution Way, Woburn, MA 01801, USA
Telephone number +1-800-200-5459, option 3
Fax +1-781-939-6963
E-mail tech@mblintl.com
URL http://www.mblintl.com/
Contact person Technical Service

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
OSHA hazard(s) Not classified.
Label elements

Hazard symbol None.
Signal word None.
Hazard statement None.
Precautionary statement
Prevention Observe good industrial hygiene practices.
Response Wash thoroughly after handling.
Storage None.
Disposal None.

Hazard(s) not otherwise classified (HNOC) None.

3. Composition/Information on ingredients

Mixtures
The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

4. First-aid measures

Inhalation Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort continues.

Skin contact Wash contact areas with soap and water. Get medical attention if irritation develops or persists.

Eye contact Do not rub eye. Rinse the eye with water immediately. Make sure to remove any contact lenses from the eyes before rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort continues.
Most important symptoms/effects, acute and delayed
Indication of immediate medical attention and special treatment needed
General information

Dry skin.
Treat symptomatically.
Get medical attention if any discomfort develops.

5. Fire-fighting measures

Suitable extinguishing media
Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
None known.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Fire-fighting equipment/instructions
Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Avoid prolonged and repeated contact. Wear suitable protective clothing. For personal protection, see Section 8 of the SDS.

Methods and materials for containment and cleaning up
Sweep up or vacuum up spillage and collect in suitable container for disposal. After removal, flush contaminated area thoroughly with water. Never return spills to original containers for re-use.

Environmental precautions
Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling
Avoid prolonged and repeated contact. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Keep container closed.

8. Exposure controls/personal protection

Occupational exposure limits
No exposure limits noted for ingredient(s).

Biological limit values
No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls
Provide adequate ventilation. Minimize dust generation and accumulation. Provide easy access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment

Eye/face protection
If risk of splashing, wear safety goggles or face shield.

Skin protection

Hand protection
Wear protective gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Other
Wear protective gloves. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protection
No protection is ordinarily required under normal conditions of use.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state
Solid.

Form
Powder.
Color: White.
Odor: Odorless.
Odor threshold: Not available.
P H: Not available.
Melting point/freezing point: Not available.
Initial boiling point and boiling range: Not available.
Flash point: Not available.
Evaporation rate: Not available.
Flammability (solid, gas): Not applicable.
Upper/lower flammability or explosive limits
- Flammability limit - lower (%): Not available.
- Flammability limit - upper (%): Not available.
Vapor pressure: Not available.
Vapor density: Not available.
Relative density: Not available.
Solubility(ies): Soluble in water.
Partition coefficient (n-octanol/water): Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
Viscosity: Not available.

10. Stability and reactivity
Reactivity: The product is stable and non reactive under normal conditions of use, storage and
chemical stability: Stable at normal conditions.
Possibility of hazardous reactions: None known.
Conditions to avoid: None known.
Incompatible materials: None known.
Hazardous decomposition products: No hazard in normal industrial use.

11. Toxicological information
Information on likely routes of exposure
Ingestion: Large quantities: May cause discomfort if swallowed.
Inhalation: Dust may irritate respiratory system.
Skin contact: Prolonged contact may cause dryness of the skin.
Eye contact: Direct contact with eyes may cause temporary irritation.
Dry skin.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects
Acute toxicity: Large quantities: May cause discomfort if swallowed.
Skin corrosion/irritation: Prolonged contact may cause dryness of the skin.
Serious eye damage/eye irritation: Direct contact with eyes may cause temporary irritation.
Respiratory sensitization: No data available.
Skin sensitization: Not a skin sensitizer.
Germ cell mutagenicity: No data available.
Carcinogenicity: No data available.
Reproductive toxicity: No data available.
Specific target organ toxicity: No data available.
- single exposure
### 12. Ecological information

**Persistence and degradability**
No data available.

**Bioaccumulative potential**
No data available.

**Mobility in soil**
No data available.

**Mobility in general**
The product is water soluble and may spread in water systems.

**Other adverse effects**
No data available.

**Specific target organ toxicity**
No data available.

- **repeated exposure**

**Aspiration hazard**
No data available.

### 13. Disposal considerations

**Disposal instructions**
Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground.

**Local disposal regulations**
Dispose of in accordance with local regulations.

**Hazardous waste code**
Not regulated.

**Waste from residues / unused products**
Dispose of in accordance with local regulations.

**Contaminated packaging**
Dispose of in same manner as unused product.

### 14. Transport information

**DOT**
Not regulated as dangerous goods.

**IATA**
Not regulated as dangerous goods.

**IMDG**
Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
Not applicable.

### 15. Regulatory information

**US federal regulations**
This product is not hazardous according to OSHA 29CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

- **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
  - Not regulated.
  - Not listed.
- **CERCLA Hazardous Substance List (40 CFR 302.4)**
  - Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

- **Hazard categories**
  - Immediate Hazard - No
  - Delayed Hazard - No
  - Fire Hazard - No
  - Pressure Hazard - No
  - Reactivity Hazard - No
  - No

- **SARA 302 Extremely hazardous substance**
  - No
- **SARA 311/312 Hazardous chemical**
  - No
- **SARA 313 (TRI reporting)**
  - Not regulated.

**Other federal regulations**

- **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**
  - Not regulated.
- **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**
  - Not regulated.
- **Safe Drinking Water Act (SDWA)**
  - Not regulated.
- **Drug Enforcement Administration (DEA), List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**
  - Not regulated.
- **Drug Enforcement Administration (DEA), List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**
  - Not regulated.
- **DEA Exempt Chemical Mixtures Code Number**
  - Not regulated.
- **Food and Drug Administration (FDA)**
  - Not regulated.
US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

- **Massachusetts RTK - Substance List**: Not regulated.
- **New Jersey Worker and Community Right-to-Know Act**: Not regulated.
- **Pennsylvania RTK - Hazardous Substances**: Not regulated.
- **Rhode Island RTK**: Not regulated.
- **California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)**: Not listed.

### International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
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<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
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<tr>
<td>Europe</td>
<td>EC Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
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<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
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<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
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</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

### 16. Other information

- **Issue date**: 01/30/2016
- **Revision date**: 09/30/2016
- **Version**: 10
- **Further information**: Not available.
- **Disclaimer**: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.