Material Safety Data Sheet

Section 1: Chemical Product / Company Identification

Product name: Ftone GM-101

Company identification
Manufacturer: DAIKIN INDUSTRIES, LTD. CHEMICAL DIVISION:
Umeda Center Bldg., 4-12, Nakazaki-Nishi2-chome, Kita-Ku,
Osaka, JAPAN
PHONE: (+81) 6-6373-4222 FAX: (+81) 6-6373-4390

Supplier in US: GSI EXIM AMERICA, INC.
461 5TH AVENUE, 16TH FLOOR NEW YORK, NY 10017
PHONE: 212-684-5760 FAX: 212-684-5846

Supplier in EU: DAIKIN CHEMICAL EUROPE GmbH
ImmermannStr.65 d, 40210 Düsseldorf, GERMANY
PHONE: (+49) 211-179225 FAX: (+49) 211-1640-734

Emergency telephone
Company: +81-6-6373-4349, +49-211-179 225 0

U.S.A. 24 HR. EMERGENCY CONTACT (800) 424-9300 CHEMTRECR

Section 2: Composition / information on ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>mass %</th>
<th>CAS No.</th>
<th>Symbols</th>
<th>R-Phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic solvent naphtha (white spirit)</td>
<td>85</td>
<td>64742-82-1</td>
<td>Xn</td>
<td>65</td>
</tr>
<tr>
<td>Fluoroalkyl acrylate copolymer</td>
<td>15</td>
<td>Confidential</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

Section 3: Hazard identification

Potential Health Effects:
- Skin contact may cause dry skin.
- Eye contact may cause severe eye irritation with discomfort, tearing, or blurring of vision.

WARNING:

- Vapors and fumes liberated during hot processing with this material may cause flu-like symptoms (chills, fever, and sometimes cough) that may not occur until several hours after exposure and typically pass within about 36 to 48 hours.

Carcinogenicity Information

- None of the components present in this material at concentrations equal to or greater than 1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.
**Section 4: First aid measures**

**Inhalation**
Remove to fresh air. Keep warm and at rest. Give artificial respiration if necessary. Consult a physician.

**Skin Contact**
Wash thoroughly with soap and water immediately. Wash contaminated clothing before re-use.

**Eyes Contact**
Flush with plenty of water for 15 minutes (remove contact lenses if easily possible). Consult a physician.

**Ingestion**
If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

**SECTION 5: Fire-fighting measures**

**Flammable Properties**
- **Flash Point:** 43.5 °C
- **Method:** closed cup

**General Information:**
White spirit is flammable and presents a moderate fire and explosion risk, especially when exposed to heat or flame. Adequate ventilation should be provided and smoking prohibited. Sealed machinery and explosion-proof electrical equipment should be used.

**Extinguishing Media:**
- Powder, foam or carbon dioxide. Containers should be kept cool by spraying with water.

**Fire fighting procedures:**
- Keep personnel removed and upwind of fire.
- Wear self-contained breathing apparatus (SCBA) and full protective equipment.
- Water may be used to cool and protect exposed containers.

**WARNING:**
Hazardous decomposition products including carbon dioxide, carbon monoxide, hydrogen fluoride, toxic gases or particles may be formed during combustion. These products may cause severe eye, nose, throat, and lung irritation or toxic effects.

**SECTION 6: Accidental release measures**

**General Information**
Use proper personal protective equipment as indicated in Section 8. Evacuate area. Keep personnel not involved with emergency activities removed and upwind.

**Spills/Leaks**
- Do NOT wash away into sewer or waterways.
- Absorb spill with dry sand, earth or any suitable adsorbent material.
- Transfer to covered steel drums for recovery or disposal.
- Dike spill.
- Remove all sources of ignition. Use a spark-proof tool.
**SECTION 7: Handling and storage**

**Handling**
- Use proper personal protective equipment as indicated in Section 8.
- Close containers after each use.
- Wash hands thoroughly after handling.
- Wash clothing after use.
- Exposure to toxic gases through inhalation can occur if smoking tobacco becomes contaminated by this material. Therefore, do not smoke in the work areas and wash hands and face after handling in order to avoid transfer of the material onto smoking tobacco.
- Keep away from heat, sparks and flames.
- Use a spark-proof tool.

**Storage**
- Keep containers tightly closed in a cool place away from heat, sparks, and flames.
- Store in a tightly closed container.

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

**Exposure Guidelines:** TLV not established.
- Stoddard solvent: CAS RN 8052-41-3; TLV: 100ppm (as TWA)(ACGIH 2000)

**Engineering Controls:**
- Provide general or local exhaust ventilation systems.

**Personal Protective Equipment:**
- **Eyes**
  - Wear safety glasses or coverall chemical splash goggles.
- **Clothing**
  - Wear impervious gloves, apron, pants, and jacket.
- **Respirators**
  - Wear NIOSH approved respiratory protection, as appropriate.

**SECTION 9: Physical and chemical properties**

**Appearance**
- Pale yellow and slight muddy liquid

**Odor**
- Light petroleum odor

**pH**
- Not applicable

**Boiling point/range**
- 150-200 °C (White spirit)

**Freezing point**
- < -15 °C

**Flash point**
- 43.5 °C (closed cup)

**Explosive properties**
- No data

**Autoignition**
- No data

**Vapor pressure**
- No data

**Vapor density**
- No data (air=1)

**Specific gravity**
- Approx. 0.82 (at 25 °C)

**Solubility**
- Water solubility: Insoluble
  - Fat solubility: Soluble

**SECTION 10: Stability and reactivity**

**REACTIVITY:**
- Stable at room temperature in closed containers under normal storage and handling conditions.

**CONDITIONS TO AVOID:**
- Incompatible materials, ignition sources, excess heat.

**INCOMPATIBILITIES:**
- Strong oxidants

**THERMAL DECOMPOSITION PRODUCTS:**
- Carbon dioxide, carbon monoxide, hydrogen fluoride, toxic gases or particles

**POLYMERIZATION:**
- Polymerization will not occur.
SECTION 11: Toxicological information

Effects of short-term exposure:
The product is a skin irritant, a slight eye irritant in animals.
The product was negative in the Bacterial Reverse Mutation Test.
The vapour is slightly irritating to the eyes and the respiratory tract. The
substance may cause effects on the central nervous system. Exposure to high
concentration of vapors may result in unconsciousness. Swallowing the liquid may
cause aspiration into the lungs with the risk of chemical pneumonitis.

Effects of long-term or repeated exposure:
The liquid defats the skin. The substance may have effects on the central nervous
system and liver, resulting in impaired functions.

SECTION 12: Ecological information
White spirit is moderately toxic to aquatic organisms.

SECTION 13: Disposal considerations
Treatment, storage, transportation, and disposal must be in accordance with
applicable Federal, State/Provincial, and Local regulations.
Do not allow product to reach sewage system.

SECTION 14: Transport information

<table>
<thead>
<tr>
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<th>1866</th>
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</thead>
<tbody>
<tr>
<td>IMDG</td>
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<td></td>
<td>-subsidiary1:</td>
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<tr>
<td>Packing group:</td>
<td>III</td>
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<tr>
<td>Proper Shipping Name:</td>
<td>RESIN SOLUTION, flammable</td>
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</table>
**SECTION 15: Regulatory information**

- **U.S. REGULATIONS:**
  - NFPA RATINGS (SCALE 0-4): HEALTH=1, FIRE=3, REACTIVITY=0

- **SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):**
  - ACUTE: Yes
  - CHRONIC: Yes
  - FIRE: Yes
  - REACTIVE: No
  - SUDDEN RELEASE: No

- **European Labeling in Accordance with EC Directives**
  - **Hazard Symbols:** F (Flammable)
  - **Risk Phrases:**
    - 38: Irritating to skin
    - 65: Harmful: may cause lung damage if swallowed.
  - **Safety Phrases:**
    - (2-): Keep out of reach of the children.
    - 23: Do not breathe vapour.
    - 24: Avoid contact with the skin.
    - 62: If swallowed do not induce vomiting: seek medical advice immediately and show this container or label.

- **Note:**
  - H
  - **Risk Note H**

  The classification and label shown for this substance applies to the dangerous property (ies) indicated by the risk phrase(s) in combination with the category (ies) of danger shown. The requirements of Article 6 of Commission Directive 98/98/EC on manufacturers, distributors and importers of this substance apply to all other aspects of classification and labelling. The final label shall follow the requirements of section 7 of Annex VI of Commission Directive 98/98/EC. This note applies to certain coal- and oil-derived substances and to certain entries for groups of substances in Annex I.

**SECTION 16: Other information**

- **EINECS listed (polymer: as monomer)**

  This product is not designed, manufactured, or intended for medical uses, including implantation to the body or other applications in direct contact with body fluids or tissues. Do not use for non-industrial applications.

  The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. The information does not relate to use in combination with any other material or in any process.

  homepage: http://www.daikin.co.jp/chm/