

# SAFETY DATA SHEET

## 1 PRODUCT AND COMPANY IDENTIFICATION

**Product name:** SUMIKAEXCEL PES 3600G, 4100G, 4800G (natural color)

**Recommended use:** Electronic industrial material

**Limitations on use:** Electronic industrial material

**Supplier:**  
**Company Name:** SUMITOMO CHEMICAL COMPANY, LIMITED  
**Contact Department / Section:** Electronic Materials Division  
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**Emergency telephone:** Asia - Pacific region (excluding China): +65-3158-1074 (CARECHEM24, Singapore)  
China: +86-10-5100-3039 (CARECHEM24, Beijing, China)  
Europe, Americas (excluding USA), Middle East, Africa, Israel (Europe and English Language speaking countries): +44-1235-239-670 (CARECHEM24, UK)  
Middle East/Africa (Arabic speaking countries): +44-1235-239-671 (CARECHEM24, UK)  
USA (Domestic call): +1-800-424-9300 (CHEMTREC, USA)  
USA (International call; collect calls accepted): +1-703-527-3887 (CHEMTREC, USA)

## 2 HAZARDS IDENTIFICATION

### GHS classification:

|                         |  |                             |
|-------------------------|--|-----------------------------|
| <b>Physical hazards</b> | Explosives   | Not applicable              |
|                         | Flammable gases  | Not applicable              |
|                         | Flammable aerosols   | Not applicable              |
|                         | Oxidizing gases  | Not applicable              |
|                         | Gases under pressure   | Not applicable              |
|                         | Flammable liquids  | Not applicable              |
|                         | Flammable solids   | Not classified              |
|                         | Self-reactive substances and mixtures                                      | Not applicable              |
|                         | Pyrophoric liquids   | Not applicable              |
|                         | Pyrophoric solids  | Not classified              |
|                         | Self-heating substances and mixtures                                       | Classification not possible |
|                         | Substances and mixtures, which in contact with water, emit flammable gases | Not classified              |
|                         | Oxidizing liquids  | Not applicable              |
|                         | Oxidizing solids   | Classification not possible |
|                         | Organic peroxides  | Not applicable              |
|                         | Corrosive to metals  | Classification not possible |
| <b>Health hazards</b>   | Acute toxicity (Oral)  | Not classified              |
|                         | Acute toxicity (Dermal)  | Classification not possible |
|                         | Acute toxicity (Inhalation - gas)  | Not applicable              |
|                         | Acute toxicity (Inhalation - vapour)                                       | Classification not possible |
|                         | Acute toxicity (Inhalation - dust and mist)                                | Classification not possible |
|                         | Skin corrosion/irritation  | Classification not possible |
|                         | Serious eye damage/eye irritation  | Classification not possible |

|                              |  |                             |
|------------------------------|--|-----------------------------|
|                              | Respiratory sensitizer                             | Classification not possible |
|                              | Skin sensitizer                                    | Classification not possible |
|                              | Germ cell mutagenicity                             | Classification not possible |
|                              | Carcinogenicity                                    | Classification not possible |
|                              | Toxic to reproduction                              | Classification not possible |
|                              | Specific target organ toxicity - single exposure   | Classification not possible |
|                              | Specific target organ toxicity - repeated exposure | Classification not possible |
|                              | Aspiration hazard                                  | Classification not possible |
| <b>Environmental hazards</b> | Acute hazards to the aquatic environment           | Classification not possible |
|                              | Chronic hazards to the aquatic environment         | Classification not possible |
|                              | Hazardous to the ozone layer                       | Classification not possible |

**GHS label elements**

Not Applicable

**3 COMPOSITION / INFORMATION ON INGREDIENTS**

**Substance or Preparation:** Substance

| Chemical name    | CAS-No.                                 | Concentration |
|------------------|---|---------------|
| Polyethersulfone | 113569-14-5<br>36313-66-3<br>25667-42-9 | 100%          |

**4 FIRST AID MEASURES**

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Apply artificial respiration if victim is not breathing. Rinse nose, mouth and throat with water. Keep victim warm with a blanket etc. Get immediate medical advice/attention. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Skin contact:** Remove/Take off immediately contaminated clothing and shoes. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Burns (in contact with molten product or heated product) : Immediately immerse in large amount of cold water, or flush with large amounts of water the affected area to dissipate heat. While flushing, remove clothes which do not adhere to affected area. Cover with clean cotton sheeting or gauze. Get immediate medical advice/attention.

**Eye contact:** Do not rub eye. Hold eyelids apart. Begin to rinse with water as soon as possible and rinse cautiously for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. Burns (in contact with molten product or heated product) : Immediately immerse in large amount of cold water, or flush with large amounts of water the affected area to dissipate heat.

**Ingestion** Rinse mouth. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Keep victim warm with a blanket etc. Get immediate medical advice/attention. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Administer oxygen if breathing is difficult. Apply artificial respiration if victim is not breathing.

**Personal Protection for First-aid Responders:** Use personal protective equipment as required.

## 5 FIRE-FIGHTING MEASURES

|  |  |
|--|--|
| <b>Extinguishing media:</b>                  | Small fires: Dry chemical powder, Carbon dioxide, Water spray, Regular foam<br>Large fires: Water spray, Fog, Regular foam   |
| <b>Unsuitable extinguishing media:</b>       | Straight streams   |
| <b>Unusual Fire &amp; Explosion Hazards:</b> | Ignites rarely but can be ignited in case of larger fire. Substance may decompose upon heating of surrounding fire to produce CO, toxic gases (See "10. Stability and reactivity") and fumes. For large fires, withdraw from fire area and let fire burn. Contact may cause burns to skin and eyes. Containers may explode when heated. Risk of fire and explosion on contact with incompatible material(s). Runoff and fire-control water may pollute waters. |
| <b>Special Fire Fighting Procedures:</b>     | Keep upwind. Keep unauthorized personnel away. If possible, remove containers exposed to heat or cool with water. Dike fire water for later disposal; do not spread the material.  |
| <b>Protective Measures:</b>                  | Wear regional, national, and local standards approved fire fighting turnout gear and positive pressure self-contained breathing apparatus. Structural firefighters' protective clothing will only provide limited protection from heat, and may not provide adequate protection from the harmful vapors or liquids.  |

## 6 ACCIDENTAL RELEASE MEASURES

|   |  |
|---|--|
| <b>Personal precautions:</b>                                    | Wear appropriate protective equipment. Use personal protection recommended in "8. Exposure control/personal protection". Isolate spill or leak area for proper distance in all directions. Provide adequate ventilation. Keep upwind. Do not touch or walk through spilled material.   |
| <b>Emergency procedures:</b>                                    | Keep all unauthorized personnel upwind away. Consult an expert. Warn inhabitants surroundings. Navigation lock on waterways. Form large safety zone.   |
| <b>Environmental precautions:</b>                               | Prevent entry spilled material and runoff from spillage control into waterways, sewers, basements or confined areas. Avoid release to the environment.   |
| <b>Clean-up methods and materials and containment measures:</b> | ELIMINATE all ignition sources such as heat/sparks/open flames/hot surfaces/static discharges. Consult an expert. Stop leak if possible without any risk. Collect scattered product into sealable containers. Moist particle solid at first to prevent scattering if appropriate. Collect fine substance by dust explosion-proof cleaner to prevent scatter. Collect remaining dust and transfer from danger area for later disposal. See "13. Disposal considerations". |
| <b>Prevention of secondary hazards:</b>                         | ELIMINATE all ignition sources such as heat/sparks/open flames/hot surfaces/static discharges. Prepare appropriate extinguishing agent. (See "5. Fire-fighting measures") For large spill, consider initial downwind evacuation for proper distance.   |

## 7 HANDLING AND STORAGE

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| <b>Handling:</b><br><b>Technical measures:</b> | Use only outdoors or in a well-ventilated area. Keep upwind for handling outdoors as much as possible. Keep unauthorized personnel away. Avoid contact with eyes, skin, and clothing. Do not breathe powder, dust, shavings, borings, turnings or cuttings. |
|--|---|

- Exhausting, Ventilation:** Ventilate by appropriate method. (See "8. Exposure control/personal protection")
- Notes:** Install appropriate equipment and wear appropriate protective clothing. (See "8. Exposure control/personal protection")
- Safety measures:** Wash hands and face thoroughly after handling. Eating, drinking and smoking in work areas is prohibited. Contaminated work clothing should not be allowed out of the workplace.
- Storage:**
- Technical measures:** Keep containers tightly closed.
- Conditions:** Well ventilate by proper manner according to regional, national and local regulations. Store in a dry place. Keep away from incompatible materials. See "10. Stability and reactivity". Keep away from food and feedstuffs.
- Packaging materials:** No data available.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- Appropriate engineering controls:** Use closed system and equipment, or local and/or general exhaust to maintain product dust concentrations in air below occupational exposure standards. Wear positive pressure self-contained breathing apparatus in circumstance above occupational exposure standards for dust including emergency procedures and cleaning for accidental release. Maintain eye wash fountain and quick-drench facilities in work area.

### Exposure limits:

| Chemical name  | Type | Exposure Limit values                       | Regulation Sources               |
|--|------|---|----------------------------------|
| Polyethersulfone<br>Particles (insoluble or poorly soluble) Not<br>Otherwise Specified (PNOS)<br>-Respirable particles<br>-Inhalable particles | TWA  | 3 mg/m <sup>3</sup><br>10 mg/m <sup>3</sup> | US. ACGIH Threshold Limit Values |

### Personal protective equipment :

- Respiratory Protection:** Breathing protective equipment should be chosen only according to specific regulatory requirements. Wear positive pressure self-contained breathing apparatus in circumstance above occupational exposure standards for dust including emergency procedures and cleaning for accidental release.
- Hand protection:** Hand protective equipment should be chosen only according to specific regulatory requirements.  
 Protective gloves  
 Heat insulating protective gloves for handling molten substance.
- Eye protection:** Eye protective equipment should be chosen only according to specific regulatory requirements. Chemical safety goggles
- Skin protection:** Personal protective equipment should be chosen only according to specific regulatory requirements. Suitable impervious protective clothing, including protective footwear, gloves, lab coat, apron or coveralls.  
 [Molten]: Wear fire proof protective clothing, including face shield, helmet and gloves.

**Specific Hygiene Measures:** PREVENT GENERATION OF DUST. [Particular solids]: Avoid inhalation of dust. [Molten] & [Particular solids] common: Do not eat, drink or smoke during work. Wash thoroughly after handling and before eating or drinking. Contaminated work clothing should not be allowed out of the workplace.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

|   |   |
|---|---|
| <b>Physical State:</b>                          | Pellet  |
| <b>Color:</b>                                   | From White to Brown   |
| <b>Odor:</b>                                    | Odorless  |
| <b>pH:</b>                                      | No data available.  |
| <b>Melting Point:</b>                           | No data available.  |
| <b>Boiling Point:</b>                           | No data available.  |
| <b>Flash Point:</b>                             | No data available.  |
| <b>Autoignition Temperature:</b>                | No data available.  |
| <b>Flammability Limit - Upper (%)—:</b>         | No data available.  |
| <b>Flammability Limit - Lower (%)—:</b>         | No data available.  |
| <b>Vapor pressure:</b>                          | No data available.  |
| <b>Vapor density (air=1):</b>                   | No data available.  |
| <b>Relative density:</b>                        | No data available.  |
| <b>Density:</b>                                 | 1.35 - 1.39 g/cm <sup>3</sup>   |
| <b>Solubility in Water:</b>                     | Insoluble   |
| <b>Solubility (other):</b>                      | Ethylene chloride: Soluble<br>Methyl ethyl ketone: Soluble<br>N-Methyl-2-Pyrrolidone: Soluble |
| <b>Partition coefficient (n-octanol/water):</b> | No data available.  |
| <b>Decomposition Temperature:</b>               | No data available.  |
| <b>Evaporation Rate:</b>                        | No data available.  |

## 10 STABILITY AND REACTIVITY

|  |  |
|--|--|
| <b>Stability:</b>                          | Stable at normal ambient conditions of temperature and pressure.         |
| <b>Possibility of hazardous reactions:</b> | Strong oxidizers Strong acids Strong bases : Fire and explosion hazards. |
| <b>Conditions to avoid:</b>                | Heating accumulation of static electricity                               |
| <b>Incompatible materials:</b>             | Strong oxidizers, Strong acids, Strong bases                             |

**Hazardous decomposition products:** Carbon monoxide, Carbon dioxide, Hydrocarbons  
Sulfur oxides., Hydrogen chloride, Phosgene, Chloride compounds, Soot

## 11 TOXICOLOGICAL INFORMATION

### Acute Toxicity:

**Oral:** Rat : LD50 > 4,000 mg/kg  
Mouse : LD50 1,300 mg/kg

**Dermal:** No data available.

**Inhalation:** No data available.

**Skin corrosion/irritation:** No data available.

**Serious eye damage/eye irritation:** No data available.

**Respiratory sensitizer/Skin sensitizer:** No data available.

**Germ cell mutagenicity:**  
**in vitro:** No data available.

**in vivo:** No data available.

**Carcinogenicity:** No data available.

**Reproductive toxicity:**  
**Teratogenicity:** No data available.

**Reproduction:** No data available.

**Specific target organ toxicity - single exposure:** No data available.

**Specific target organ toxicity - repeated exposure:** No data available.

**Aspiration hazard:** No data available.

**Other Effects:** No data available.

## 12 ECOLOGICAL INFORMATION

### Ecotoxicity:

#### Aquatic Organisms:

##### Acute toxicity:

**Fish:** No data available.  
**Crustacea:** No data available.  
**Alga:** No data available.

##### Chronic Toxicity:

**Fish:** No data available.  
**Crustacea:** No data available.  
**Alga:** No data available.

##### Others:

No data available.

|                                      |   |
|--------------------------------------|---|
| <b>Biodegradation:</b>               | No data available.  |
| <b>Bioaccumulation:</b>              | No data available.  |
| <b>Mobility in soil:</b>             | No data available.  |
| <b>Hazardous to the ozone layer:</b> | Montreal Protocol. Substances that Deplete the Ozone Layer, as amended :<br>Not listed to the Montreal Protocol |

### 13 DISPOSAL CONSIDERATIONS

|                          |   |
|--------------------------|---|
| <b>Disposal Methods:</b> | Dispose of contents/container appropriately in accordance with local/regional/national/international regulations. |
|--------------------------|---|

### 14 TRANSPORT INFORMATION

**International standards:**

This material is not subject to transport regulations.

|                           |                                  |
|---------------------------|----------------------------------|
| <b>Domestic Standard:</b> | In compliance with domestic law. |
|---------------------------|----------------------------------|

|  |   |
|--|---|
| <b>Specific Safety Measures and Conditions for Transportation:</b> | Make sure no damage, corrosion, leaks, and so on on the container(s) before transportation. Load not to fall, drop, damage the product, and make sure to take measures to secure the loaded products. Equip in automobile or ship for transportation with protective equipment (gloves, eyeglasses, mask, etc), and fire extinguisher, tools necessary for emergency. |
|--|---|

### 15 REGULATORY INFORMATION

Please follow local regulations.

### 16 OTHER INFORMATION

|                    |   |
|--------------------|---|
| <b>Disclaimer:</b> | The provided information is based on currently available law, materials, information, and data; however, information regarding concentration, physical and chemical properties, and hazard identification is not guaranteed. Precautions for safe handling are intended for a normal condition. In case of specific condition, please handle a product with appropriate safety measures that are compatible to the product usage. |
|--------------------|---|