SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Trade name: SCG™ PE WAX

Product type: Polyethylene Homopolymer Wax (Refined) or Low Molecular Weight Polyethylene

This SDS applies to all grades of Polyethylene Homopolymer Wax (Refined) or Low Molecular Weight Polyethylene manufactured by SCG Performance Co., Ltd.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Application of the substance / the preparation: Raw material for different industrial uses

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: SCG Performance Co., Ltd.
1 Siam Cement Road, Bangsue, Bangkok 10800 Thailand
Tel: +66 2 586 1111
Fax: +66 2 586 3676
www.scgchemicals.com

Further information obtainable from:
Quality Assurance Department or Environmental Health and Safety Department
10 I-1 road, Map Ta Phut Industrial Estate, Muang, Rayong 21150 Thailand
Tel: +66 3868 3393-7 ext. 2407 or 2459

or

Technical Service and Development Department
1 Siam Cement Road, Bangsue, Bangkok 10800 Thailand
Tel: +66 2586 1111 Fax: +66 2586 3676

1.4 Emergency telephone number:

Environmental Health and Safety Department
Tel: +66 3868 3138

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

• Classification according to Globally Harmonized System (GHS):
  The substance is not classified as hazardous according to GHS.

• Classification according to Regulation (EC) No 1272/2008 (CLP):
  The substance is not classified as hazardous according to the CLP regulation.
• Classification according to Directive 67/548/EEC or Directive 1999/45/EC:
The substance is not classified as hazardous according to Directive 67/548/EEC or Directive 1999/45/EC.

2.2 Label elements

• Labelling according to GHS: None
• Labelling according to Regulation (EC) No 1272/2008: None
• Hazard pictograms: None
• Signal word: None
• Hazard statements: None
• Precautionary statements:
  Prevention: Not Applicable
  Response: Not Applicable
  Storage: Not Applicable
  Disposal: Not Applicable
• Additional information:
  Pellets on the floor may cause a serious slipping hazard.
  Skin or eye contact with hot polymer can cause thermal burns.
  Processing the polymer at high temperatures may form vapors that irritate the eyes and respiratory tract.

2.3 Other hazards

• Results of PBT and vPvB assessment
  - PBT: Not determined
  - vPvB: Not determined

SECTION 3: Composition/information on ingredients

3.1 Chemical characterization:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Concentration (wt%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene Homopolymer</td>
<td>9002-88-4</td>
<td>-</td>
<td>100%</td>
</tr>
</tbody>
</table>
SECTION 4: First Aid Measures

4.1 Description of first aid measures:

• General information:
  Take affected persons out of danger area and lay down.

• After inhalation:
  Move person to fresh air; if symptoms persist, consult a doctor.

• After skin contact:
  Wash exposed area with soap and water. Seek medical attention if symptoms develop or persist. If molten polymer comes in contact with the skin, cool rapidly with cold water or running water. Do not pull solidified polymer off the skin. Seek medical attention immediately.

• After eye contact:
  In case of dust contact with eyes, flush thoroughly with running water for 5-15 minutes. Remove contact lenses, if worn. Seek medical attention if irritating persists. For thermal eye burns, immediately flush eyes with running water for 5-15 minutes. Do not remove contact lenses, if worn. Seek medical attention immediately, preferably an ophthalmologist.

• After swallowing:
  Rinse out mouth with water and gargle with plenty of water. If swallowed, consult a doctor. May cause gastrointestinal blockage. Do not give laxative. Do not induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed:
  Skin and eye burns from molten product. Skin and eye irritation from product dusts. Irritated respiratory tract from dust inhalation.

4.3 Indication of any immediate medical attention and special treatment needed:
  Treat symptomatically and supportively.
SECTION 5: Firefighting Measures

5.1 Extinguishing media:

• Suitable extinguishing agents:
  CO2, powder or water spray. Fight larger fires with water spray.
  Use fire extinguishing methods suitable to surrounding conditions.

• Unsuitable extinguishing agents:
  Do not use water jet

5.2 Special hazards arising from the substance or mixture:

• Hazard combustion products:
  Carbon dioxide (CO2), Carbon monoxide (CO), other organic vapors and soot.

5.3 Advice for firefighters:

• Protective equipment:
  Fire-fighters should wear appropriate protective equipment (includes fire-fighting helmet, coat, trousers, boots and gloves) and positive pressure self-contained breathing apparatus (SCBA).

• Fire Fighting Procedure:
  Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone.

• Additional information:
  Collect contaminated fire fighting water separately. It must not enter the sewage system. Cool endangered receptacles with water spray.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

• For non-emergency personnel:
  Material creates a slipping hazard on hard surfaces. Clean up spills from walking surfaces immediately. Eliminate sources of ignition. Avoid formation of dust.

• For emergency responders:
  Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
6.2 Environmental precautions:

- Avoid dispersal and contact with soil, waterways, sewers and groundwater.

6.3 Methods and material for containment and cleaning up:

- **For containment:** place in a designated and labeled waste container.
- **For cleaning up:** sweep or shovel into suitable containers. Do not allow water contaminated with pellets or powder to enter any waterway, sewer or drain.
- **Other information:** Dispose of contaminated material at an authorized site. Notify authorities if product enters sewers or public waters.

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:

- **Protective Measures:**
  
  Put on appropriate personal protective equipment (see Section 8). Avoid contacting molten material with eyes, skin and clothing. Avoid breathing dust and process fumes. Ensure good ventilation at the workplace. Prevent dust accumulation. Pneumatic conveying of powder and pellets and other mechanical handling operations can generate large static electrical charges. Dust can be ignited by static electrical discharge. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Worker should handle the container with appropriate apparatus such as forklift and handlift. If worker feel stiff, should take a rest sufficiently.

- **Advice on general occupational hygiene:**
  
  Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
  Always wash hands after handling the product.
7.2 Conditions for safe storage, including any incompatibilities:

- **Technical measures and storage conditions:**
  Electrically bond and ground equipment to reduce the potential for dust explosions. Store in dry, cool, dust-free and well-ventilated area at temperature below 50ºC. Protect from heat, direct sunlight and rain.

- **Packaging materials:**
  Store only in the original container. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

- **Materials to avoid:**
  Store away from incompatible substances, flammable substances and oxidizing agents.

- **Further information about storage conditions:**
  Use an appropriate handling and storage method as described in Manufacturer’s “Handling and storage guide” Manual. (Please visit this website www.scgchemicals.com)

7.3 Specific end uses:
No further relevant information available.

### SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters:

- **Occupational Exposure Limits**
  Not established

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:
Provide readily accessible eye wash stations and safety showers. Ensure adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
8.2.2 Personal protective equipment:

- **Eye/Face protection**
  
  Use safety glasses with side shields. If this material is heated and there is potential for dust, wear chemical goggles.

- **Skin protection**
  
  - **Hand protection**
    
    Skin contact should be minimized. Use gloves to protect from mechanical injury. Chemical protective gloves should not be needed when handling this material. Use insulated gloves when handling the hot or molten material.

  - **Body protection**
    
    At ambient temperatures use of clean and protective clothing is good industrial practice. If the material is heated or molten, wear thermally insulated, heat-resistant gloves that are able to withstand the temperature of the molten product. If this material is heated, wear insulated clothing to prevent skin contact if engineering controls or work practices are not adequate.

- **Respiratory protection**
  
  A properly fitted air purifying respirator or air supply respirator should be worn if a risk assessment indicates that respiratory protection is necessary. Respirator selection must be based upon known or measured levels of exposure.

8.2.3 Environmental exposure control:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

- **Appearance:** Powder or Flakes or Pastiles
- **Physical state:** Solid
- **Color:** White
- **Odor:** Light
- **Odor threshold:** No data available
- **pH:** Not applicable
- **Melting point:** 90-120 °C
- **Boiling point:** Not applicable
- **Flash point:** > 220 °C (ASTM D-92 (Open cup))
- **Evaporation rate:** Not applicable
- **Flammability (solid, gas):** No
- **Upper/lower explosion limits:** Not applicable
- **Vapor pressure:** Not applicable
- **Vapor density:** Not applicable
- **Relative density:** No data available
- **Density at 23°C:** 0.93-0.95 g/cm³
- **Solubility in water:** Insoluble.
- **Partition coefficient, n-octane/water:** No data available
- **Auto-ignition temperature:** No data available
- **Decomposed temperature:** No data available
- **Viscosity, kinematic:** Not applicable
- **Viscosity, dynamic:** No data available
- **Explosive properties:** No
- **Oxidizing properties:** No

9.2 Other information:
No further relevant information available.
**SECTION 10**: Stability and Reactivity

10.1 Reactivity:
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability:
The product is stable at normal handling and storage conditions.

10.3 Possibility of hazardous reactions:
Polymerization will not occur. Dust may form explosive mixture in air.

10.4 Conditions to avoid:
Avoid prolonged storage at elevated temperature. Exposure to elevated temperatures can cause product to decompose. (Temperature should less than 280°C). See Technical Datasheet for suitable processing condition. Avoid dust formation. Avoid the build-up of electrostatic charge.

10.5 Incompatible materials:
Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products:
Burning can produce carbon monoxide and/or carbon dioxide and other harmful products. The decomposition products are low molecular weight oligomers, hydrocarbons and hydrocarbon oxidation product (aldehydes, alcohols, organic acids) depending on temperature and air availability.

**SECTION 11**: Toxicological Information

**Information on toxicological effects:**

- **Acute toxicity:**
  LD50 oral, rat: Not determined.

- **Skin corrosion/irritation:**
  Non-irritating to skin. Mechanical injury only. Molten polymer may cause serious thermal burns.

- **Eye damage/irritation:**
  Dust may cause eye irritation upon repetitive or prolonged exposure. Molten polymer may cause serious thermal burns. Vapors released during thermal processing may cause eye irritation experienced as mild discomfort and redness.
SAFETY DATA SHEET

Product Name
SCG™ PE WAX

Product Type
Polyethylene Homopolymer Wax (Refined)

Revision: 01.01.2019 (Valid for 3 years from the last version)

Version No: 8

1. Identification

Product Name: SCG™ PE WAX

Company Name: Thai Polyethylene Co., Ltd.

Company Address: 10 I-1 Road, Map Ta Phut Industrial Estate, Muang, Rayong, 21150 Thailand

Telephone: +66 3868 3393-7 Fax: +66 3868 3398

2. Hazards Identification

2.1 Hazard Class and Category

Not applicable

2.2 GHS Classification

No classification applicable

2.3 Labeling Information

Not applicable

3. Composition Information

3.1 Substances

Polyethylene Homopolymer Wax: 100%

3.2 Technical Grade

Polyethylene Homopolymer Wax (Refined)

3.3 Impurities

None

4. First Aid Measures

4.1 First Aid Measures

Inhalation: Remove to fresh air. If symptoms occur, seek medical attention.

Skin Contact: Wash affected area with soap and water. If irritation persists, seek medical attention.

Eye Contact: Flush eyes with plenty of water for 15 minutes. Seek medical attention.

Ingestion: Do not induce vomiting. Drink water or milk. Call a Poison Control Center or seek medical attention.

4.2 Specific Materials/Exposure Scenarios

Not applicable

5. Fire Fighting Measures

5.1 Extinguishing Media

CO², dry chemical powder

5.2 Special Fire Fighting Procedures

Not applicable

5.3 Fire Hazards

No special hazards

6. Accidental Release Measures

6.1 Spill Containment

Absorb spills with suitable non-flammable material

6.2 Personal Protection

Use appropriate personal protective equipment.

6.3 Environmental Protection

Protect environment from contamination

7. Handling and Storage

7.1 Handling

Avoid contact with skin and eyes. Store in a cool, dry place.

7.2 Storage

Store in a cool, dry place away from heat sources.

8. Exposure Controls/Personal Protection

8.1 Control Parameters

Not applicable

8.2 Exposure Limit Values

Not applicable

8.3 Personal Protective Equipment

Respiratory Protection: None required.

Protective Clothing: None required.

Eye Protection: None required.

Hand Protection: None required.

9. Physical and Chemical Properties

9.1 Physical State

Solid

9.2 Appearance

Beige, waxy, powder

9.3 Odor

None

9.4 Odor Threshold

Not applicable

9.5 Melting Point

Approx. 60-70°C

9.6 Freezing Point

Not applicable

9.7 Boiling Point

Not applicable

9.8 Density

Approx. 0.95 g/cm³

9.9 pH Value

Not applicable

9.10 Viscosity

Approx. 10000 mPa·s

9.11 Solubility

Not applicable

9.12 Stability

Stable under normal conditions

9.13 Reactivity

Not applicable

10. Stability and Reactivity

10.1 Reactions to Be Avoided

None

10.2 Stable Under Normal Conditions

Stable under normal conditions

10.3 Unstable Conditions

None

10.4 Incompatibility (Materials to Avoid)

None

10.5 Hazardous Decomposition Products

None

11. Toxicological Information

11.1 Skin and Eye Irritation

Not applicable

11.2 Sensitization

Not applicable

11.3 Germ Cell Mutagenicity

Not applicable

11.4 Carcinogenicity

Not applicable

11.5 Reproductive Toxicity

Not applicable

11.6 Toxicity to Aquatic Life

Not applicable

11.7 Long-Term Effects

Not applicable

11.8 Endocrine Disruptor Potential

Not applicable

11.9 Other Toxicological Effects

Not applicable

12. Ecological Information

12.1 Toxicity

12.1.1 Aquatic Toxicity

Not expected to be acutely toxic, but material in pellet form may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

12.2 Persistence and Degradability

Not easily biodegradable

12.3 Bioaccumulative Potential

This material is not expected to bioaccumulate because of the relatively high molecular weight (MW greater than 1000).

12.4 Mobility in Soil

This material is expected to remain in the soil and float on the water surface

12.5 Results of PBT and vPvB Assessment

PBT: Not determined

vPvB: Not determined

12.6 Other Adverse Effects

Avoid release to the environment.
SECTION 13: Disposal Considerations

13.1 Waste treatment methods:

- **Waste disposal:** Do not dump into any sewers, on the ground, or into any body of water. All disposal practices must be in compliance with official or local regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable regulations are the responsibility solely of the waste generator.

- **Packaging disposal:** Do not reuse container. Disposal must be in compliance with official or local regulations. The packaging only use for industrial purpose.

- **Waste treatment option:** Recycle if possible

- **Other disposal recommendations:** Disposal must be made according to official or local regulations.

SECTION 14: Transport information

14.1 UN-Number:

- ADR, IMDG, IATA

14.2 UN proper shipping name:

- ADR, IMDG, IATA

14.3 Transport hazard class(es):

- ADR, IMDG, IATA

14.4 Packing group:

- ADR, IMDG, IATA

14.5 Environmental hazards:

- Marine pollutant: No

14.6 Special precautions for user: Not applicable.
14.7 Transport in bulk: Not applicable.
    (according to Annex II of MARPOL73/78 and the IBC Code)
    • Transport/Additional information: Not dangerous according to the above specifications.
    • UN "Model Regulation": -

SECTION 15: Regulatory information

15.1 Chemical inventories
    More information on Declaration of Compliance (DoC)
15.2 Chemical safety assessment:
    A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Recommended Uses and Restrictions
This product is a raw material for industrial conversion. We recommended you to use this product under
description in this document only.

Issued by
Thai Polyethylene Co., Ltd (QA & QC Department)
10 I-1 road, Map Ta Phut Industrial Estate, Muang, Rayong 21150 Thailand
Tel: +66 38 683393-7 ext. 2407
Fax: +66 38 683398

Disclaimer:
• It is customer’s responsibilities to inspect and test the product for suitability of the customer’s own use and purpose.
  The customer is responsible for appropriate, safe, legal use, processing and handling of the product.
• To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication. We however do not assume any liability whatsoever for the accuracy and completeness of the information contained herein.
• We make no warranties which extend beyond the description herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.
• No liability can be accepted in respect of the use of the product in conjunction with other materials. The information contained herein relates exclusively to the product when it is not used in conjunction with any third party’s materials.
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
- IATA: International Air Transport Association
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)