## Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

**1.1 Product Identifier(s)** **PlatSil® Gel-OO Silicone Rubber Part B**
Product Code(s): GEL00B

**1.2 Relevant Identified Uses of the Substance or Mixture:** Component for silicone mold rubber. For Industrial/Professional use only.

**Uses Advised Against:** Keep out of the reach of children.

**1.3 Details of the Supplier of the Safety Data Sheet**

**Manufacturer:**
Polytek Development Corp.
55 Hilton St.
Easton, PA 18042
USA
Phone: 800-858-5900 (8 a.m. to 6:30 p.m. EST)
Email: sds@polytek.com

**Distributer:**
Neill's Materials
Unit 5 Chapel Pond Hill
Bury Saint Edmunds
Suffolk, IP32 7HT
United Kingdom
Phone: +44 1284 630028
Email: info@neillsmaterials.co.uk

**1.4 Emergency Telephone Number:** CHEMTREC (+1) 703-527-3887

## Section 2: Hazards Identification

**2.1 Classification of the Substance or Mixture:**
**CLP/GHS (No 1272/2008):** Not classified as hazardous.

**2.2 Label Elements:** None required. Not classified as hazardous.

**Supplemental Information**: May cause mild eye and skin irritation. Avoid contact with eyes and mucous membranes.

**2.3 Other Hazards:**

Based on available data, this product does not contain substances which are classified as PB&T or vPB&T at or above 0.1%.

Based on available data, this product does not contain substances that are/under assessment as being Endocrine Disrupting at or above 0.1%.

## Section 3: Composition/Information on Ingredients

**3.2 Mixtures**

| Chemical Name | CAS # | EC # | CLP Annex VI Classification | % |
|---|---|---|---|---|
| Hexamethyldisilazane | 999-97-3 | 213-668-5 | Flammable Liquid – Category 2 (H225)<br>Acute Toxicity (Oral) – Category 4 (H302)<br>Acute Toxicity (Dermal) – Category 3 (H311)<br>Acute Toxicity (Inhalation) – Category 4 (H332)<br>Aquatic Toxicity (Chronic) – Category 3 (H412)<br>**Acute Toxicity Estimate (ATE)**<br>Oral $LD_{50}$ (Rat): 847 mg/kg<br>Dermal $LD_{50}$ (Rabbit): 544 mg/kg<br>Inhalation $LC_{50}$ (Rat): 10,000 mg/m$^3$ (6 hr.) | 3-4 |
| Exact concentrations are withheld as trade secret. Ingredients are not listed because they are either not hazardous or are below concentration/cut-off thresholds. | | | | |

## Section 4: First-Aid Measures

**4.1 Description of First Aid Measures:**
**Eye:** Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Get medical attention if irritation develops or persists.
**Skin:** Wash contact area thoroughly with soap and water. Get medical attention if irritation develops and persists.
**Inhalation:** If breathing is difficult, remove person to fresh air. Get medical attention if symptoms develop or persist.
**Ingestion:** If swallowed, rinse mouth. Drink water. Induce vomiting only with medical supervision. Get medical attention if you feel unwell.

**4.2 Most Important symptoms and effects, both acute and delayed:** None known.

**4.3 Indication of any immediate medical attention and special treatment needed:** Not expected to be required.

## Section 5: Fire-Fighting Measures

**5.1 Suitable Extinguishing Media:** Use carbon dioxide, dry chemical, foams, or water spray.

**Unsuitable Extinguishing Media:** Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or eruption.

**5.2 Special Hazards Arising from the Substance or Mixture:**
**Unusual Fire and Explosion Hazards:** Not classified as flammable or combustible. May generate formaldehyde in fire conditions.
**Combustion Products:** Formaldehyde and oxides of carbon and silicon.

**5.3 Advice for Fire-Fighters:** Wear an approved, positive pressure, self-contained breathing apparatus and full-body protective clothing. Cool fire-exposed containers with water.

## Section 6: Accidental Release Measures

**6.1 Personal Precautions, Protective Equipment and Emergency Procedures:**
**6.1.1: Non-Emergency Personnel:** Remove all ignition sources. Clear other non-emergency personnel from the area. Wear appropriate protective clothing to avoid eye and skin contact and avoid breathing of vapors. Ventilate area. Caution – spill area may be slippery.
**6.1.2: Emergency Personnel:** Remove all ignition sources. Clear non-emergency personnel from the area. Wear appropriate protective clothing to avoid eye and skin contact and avoid breathing of vapors. Ventilate area. Caution – spill area may be slippery.

**6.2 Environmental Precautions:** Prevent release to the environment. Report spills and releases as required to appropriate authorities.

**6.3 Methods and Material for Containment and Cleaning Up:**
**6.3.1: Containment:** Cover with an inert absorbent material and collect into an appropriate container for disposal. Do not seal the container since $CO_2$ is generated on contact with moisture and dangerous pressure buildup can occur.
**6.3.2: Clean-up:** Decontaminate floor area with a mixture of water plus isopropyl alcohol (20%), household ammonia (10%), and detergent (2%).
**6.3.3: Other Information:** No additional information available.

**6.4 Reference to Other Sections:** Refer to Section 8 for protective clothing and Section 13 for disposal.

## Section 7: Handling and Storage

**7.1 Precautions for Safe Handling**: Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep container closed when not in use.

**7.2 Conditions for Safe Storage, Including any Incompatibilities**: Store indoors at temperatures between 16 and 35°C (60 and 95°F). Store in original containers. Avoid getting moisture into containers. Keep containers tightly closed. Avoid contact with strong oxidizers.

**7.3 Specific end use(s):** None identified

## Section 8: Exposure Controls/Personal Protection

**8.1 Control Parameters:**
**Occupational Exposure Limits:** None Established
**Biological Exposure Index:** None Established
**Derived No Effect Level (DNEL):**

| Substance Name | End Use | Exposure Route | Potential Health Effects | Value |
|---|---|---|---|---|
| Hexamethyldisilazane | Workers | Inhalation | Long term systemic effects | 53 mg/m3 |
| | | | Acute systemic effects | 106 mg/m3 |
| | | | Long term local effects | 133 mg/m3 |
| | | | Acute local effects | 341 mg/m3 |
| | | Dermal | Long term systemic effects | 7.5 mg/kg bw/day |

**Predicted No Effect Concentration (PNEC):** None Established

**8.2 Exposure Controls:**

**8.2.1: Engineering Controls:** Use with adequate general or local exhaust ventilation to minimize exposure limits.

**8.2.2: Individual Protection Measures**

**(a) Eye/Face Protection:** Wear chemical safety goggles.

**(b) Skin Protection:**

**(i) Hand Protection:** Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Suggested gloves are impervious and made of butyl rubber or nitrile rubber with a breakthrough time greater than 240 minutes with a protection class of 5 or higher and a thickness greater than 0.35 mm. NOTICE: Glove selection may vary depending on the use/application of the mixture, duration of use in a workplace, other chemicals handled, potential bodily reactions to glove materials and instructions/specifications provided by the glove supplier.

**(ii) Protective Clothing:** Wear impervious clothing of compatible material such as cotton to prevent skin contact and contamination of personal clothing.

**(c) Respiratory Protection:** If needed, an approved respirator with organic vapor cartridges may be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

**(d) Thermal Hazards:** Not classified as a flammable or combustible material.

**8.2.3. Environmental Exposure Controls:** Avoid release into the environment. Do not dispose of chemical down drain.

## Section 9: Physical and Chemical Properties

**9.1 Information on basic Physical and Chemical Properties**

**(a) Physical State:** Liquid

**(b) Colour:** Colours vary

**(c) Odour:** No data available.

**(d) Melting Point/Freezing Point:** No test data available

**(e) Boiling Point or Initial Boiling Point and Boiling Range:** No test data available

**(f) Flammability:** Not applicable

**(g) Lower and Upper Explosion Limit:** No test data available

**(h) Flash Point:** >150°C (302°F) (estimated)

**(i) Auto-Ignition Temperature:** No test data available

**(j) Decomposition Temperature:** No test data available

**(k) pH:** Not applicable

**(l) Kinematic Viscosity:** 50 cP – 68,000 cP @ 25°C

**(m) Solubility:** Insoluble in water

**(n) Partition Coefficient n-Octanol/Water (log value):** No test data available.

**(o) Vapour Pressure:** No test data available.

**(p) Density and/or Relative Density:** <1.0-1.3 @ 25°C

**(q) Relative Vapour Density:** No test data available

**(r) Particle Characteristics:** No test data available

**9.2 Other Information:**

**9.2.1. Information With Regard to Physical Hazard Classes:**

**(a) Explosive Properties:** Not explosive

**(b) Oxidizing Properties:** Not oxidizing

**9.2.2. Other Safety Characteristics:** None available

## Section 10: Stability and Reactivity

**10.1 Reactivity:** Not normally reactive.

**10.2 Chemical Stability:** Stable under recommended conditions.

**10.3 Possibility of Hazardous Reactions:** None known.

**10.4 Conditions to Avoid:** Avoid excessive heat.

**10.5 Incompatible Materials:** Avoid contact with strong oxidizers.

**10.6 Hazardous Decomposition Products:** Thermal decomposition will generate formaldehyde and oxides of carbon and silicon.

## Section 11: Toxicological Information

**11.1 Information on Toxicological Effects:**

**(a) Acute Toxicity:**

Oral: Not acutely hazardous

Dermal: Not acutely hazardous

Inhalation: Not acutely hazardous

**(b) Skin Corrosion/Irritation:** No data available.

**(c) Serious Eye Damage/Irritation:** No data available.

**(d) Respiratory or Skin Sensitization:** Components are not classified as respiratory or skin sensitizers.

**(e) Germ Cell Mutagenicity:** Components are not classified as mutagens.

**(f) Carcinogenicity:** Components are not classified as carcinogens.

**(g) Reproductive Toxicity:** Components are not classified as reproductive toxins.

**(h) STOT-Single Exposure:** No data available.

**(i) STOT-Repeated Exposure:** No data available.

**(j) Aspiration Hazard:** No data available.

**11.2 Information on Other Hazards:** Based on available data, this product does not contain substances that are/under assessment as being Endocrine Disrupting at or above 0.1%.

## Section 12: Ecological Information

**12.1 Toxicity:** No data available Avoid release to the environment.

**12.2 Persistence and Degradability:** No test data; but product is not expected to be readily biodegradable.

**12.3 Bioaccumulative Potential:** No test data; but product is not expected to bioaccumulate.

**12.4 Mobility in Soil:** No data available.

**12.5 Results of PBT and vPvB Assessment:** Based on available data, this product does not contain substances which are classified as PB&T or vPB&T at or above 0.1%.

**12.6 Endocrine Disruption Properties:** Based on available data, this product does not contain substances that are/under assessment as being Endocrine Disrupting at or above 0.1%.

**12.7 Other Adverse Effects:** No data available.

## Section 13: Disposal Considerations

**13.1 Waste Treatment Methods:**

**Waste From Residues/Unused Products:** Dispose of in accordance with local regulations.

**Contaminated Packaging:** Dispose of this container to a special waste collection point.

**European Waste Catalogue (EWC):** According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

**Other Information:** Do not flush to sewer or empty into drains. Waste Codes should be assigned by the user based on the application for which the product was used.

## Section 14: Transport Information

| | 14.1 UN Number | 14.2 UN Proper Shipping Name | 14.3 Transport Hazard Class(es) | 14.4 Packing Group | 14.5 Environmental Hazards |
|---|---|---|---|---|---|
| **US DOT** | None | Not Regulated | None | None | No |
| **Canadian TDG** | None | Not Regulated | None | None | No |
| **EU ADR/RID** | None | Not Regulated | None | None | No |
| **IMDG** | None | Not Regulated | None | None | No |
| **IATA/ICAO** | None | Not Regulated | None | None | No |

**14.6 Special Precautions for User:** Not applicable

**14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable

## Section 15: Regulatory Information

**15.1 Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:**

The mixture or substance is not subject to Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer, Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC, and Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals.

**REACH**: Substances in this formulation imported to EU in >1 tonne/yr are registered. Based on available information, this product does not contain any substances of very high concern (SVHCs).

**International Inventories:** To be determined

**European Inventory of Existing Chemicals (EINECS):** All of the components in this product are listed on the EINECS inventory.

**15.2 Chemical Safety Assessment:** A Chemical Safety Assessment has not been conducted.

## Section 16: Other Information

**SDS Revision Note:** SDS Created: May 8, 2024

**Abbreviations and Acronym Key:**

Canadian TDG: Canadian Transportation of Dangerous Goods

CAS: Chemical Abstracts Service

CLP: Classification, Labeling and Packaging

DFG: German Research Foundation (Deutsche Forschungsgemeinschaft)

EU ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR)

GHS: Globally Harmonized System

IATA/ICAO: International Air Transport Association

IBC Code: International Bulk Chemical Code

IMDG: International Maritime Dangerous Goods

MARPOL: Marine Pollution

PBT: Persistence Bioaccumulation and Toxicity.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

SDS: Safety Data Sheet

STOT: Specific Target Organ Toxicity

SVHC: Substance of Very High Concern

vPvB: very Persistent and very Bio-accumulative

UFI: Unique Formula Identifier

US DOT: United States Department of Transportation

**Additional Hazard Phrases from Section 3.2**

| | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin. |
| H332 | Harmful if inhaled. |
| H412 | Harmful to aquatic life with long lasting effects |

**Key Literature References and Sources of Data:** Raw material safety data sheets and internal sources.

**Method of Evaluating Information Referred to in Article 9 of Regulation (EC) No 1272/2008:** Calculation method was utilized.

**Training Advice:** All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.