SAFETY DATA SHEET
Revision Date  09/Feb/2018

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Description: POLYLITE® HS 35065-00

Other means of identification
SAP ID(s): 193895 ; 193896; 201924
Material Code: 35065-00
Chemical Family: Vinyl Hybrid

Recommended use of the chemical and restrictions on use
Recommended Use
Pultrusion Resin
Infusion resin
Resin Transfer Molding (RTM)
Molding Resin
Filament Winding Resin

Uses advised against
No information available

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Reproductive toxicity
Category 2

Label elements

Emergency Overview

Warning

Hazard statements
Suspected of damaging fertility or the unborn child
Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing vapor or mist
Do not get in eyes, on skin, or on clothing
Use personal protective equipment as required
Wash hands thoroughly after handling

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant
Dispose of in accordance with federal, state and local regulations

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
Toxic to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinyl Hybrid Resin</td>
<td>Proprietary</td>
<td>&gt;99%</td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>&lt;0.4</td>
<td>*</td>
</tr>
</tbody>
</table>

* The exact percentage (concentration) of composition has been withheld as a trade secret. If CAS number is "proprietary", the specific chemical identity has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures

Eye Contact
Move individual away from exposure. Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Skin Contact
Wash off immediately with soap and plenty of water. Take off contaminated clothing and wash before reuse. Get medical attention if irritation develops and persists.

Inhalation
Remove person to fresh air. If signs/symptoms continue, get medical attention.

Ingestion
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Seek immediate medical attention/advice.

Most important symptoms and effects, both acute and delayed

No information available. Irritating to eyes, respiratory system and skin.

Indication of any immediate medical attention and special treatment needed
Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Carbon dioxide (CO2), Foam, Dry chemical, Water spray

Unsuitable Extinguishing Media
Do not use a solid water stream as it may scatter and spread fire. Water or foam may cause frothing.

Specific hazards arising from the chemical

Hazardous combustion products
Carbon monoxide, Carbon dioxide (CO2)

Combustion/explosion hazards
This material may polymerize (react) when its container is exposed to heat (as during a fire). This polymerization increases pressure inside a closed container and may result in the violent rupture of the container.

Protective Equipment and Precautions for Firefighters
Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. Thoroughly decontaminate all protective equipment after use. Evacuate all persons from the fire area to a safe location. Move non-burning material, as feasible, to a safe location as soon as possible. Fire fighters should be protected from potential explosion hazard while extinguishing the blaze. Use water spray to cool fire-exposed containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions
Evacuate personnel to safe areas. Use personal protective equipment as required. Ensure adequate ventilation. Keep people away from and upwind of spill/leak.

Environment precautions

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Soak up with inert absorbent material and dispose of as hazardous waste. Do not flush into surface water or sanitary sewer system. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and material for containment and cleaning up

Methods for Containment
Prevent spilled material from 1) contaminating soil, 2) entering sanitary sewers, storm sewers, and drainage systems, and 3) entering bodies of water or ditches that lead to waterways. Prevent spreading over a wide area (e.g. by containment or oil barriers).

Methods for Clean-up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Do not breathe vapor or mist. Avoid contact with skin, eyes or clothing. Wash hands before breaks and immediately after handling the product. Take off contaminated clothing and wash before reuse. Ensure adequate ventilation. Empty containers may retain product residue (liquid and/or vapor). Do not pressurize, cut, weld, braze, solder, drill, grind, or expose these containers to heat, flame, sparks, static electricity, or other sources of ignition as the container may explode and may cause injury or death. Empty drums should be completely drained and properly bunged. Empty drums should be promptly returned to a drum reconditioner or properly disposed. Avoid use of electric band heaters. Avoid breathing vapors or mists.
Conditions for safe storage, including any incompatibilities

Storage

Keep container tightly closed. Keep in a dry place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits

Toluene (CAS #: 108-88-3)

<table>
<thead>
<tr>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH TLV</td>
<td>20 ppm TWA</td>
</tr>
<tr>
<td>OSHA PEL</td>
<td>200 ppm TWA</td>
</tr>
<tr>
<td>Canada - Alberta OELs</td>
<td>300 ppm Ceiling</td>
</tr>
<tr>
<td>Canada - Ontario OELs</td>
<td>50 ppm TWA</td>
</tr>
<tr>
<td>Canada - British Columbia OELs</td>
<td>188 mg/m³ TWA</td>
</tr>
<tr>
<td>NIOSH IDLH</td>
<td>500 ppm</td>
</tr>
<tr>
<td>Mexico OEL</td>
<td>50 ppm TWA</td>
</tr>
<tr>
<td></td>
<td>188 mg/m³ TWA (skin)</td>
</tr>
</tbody>
</table>

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
TLV® (Threshold Limit Value)
TWA (time-weighted average)
OEL - Occupational Exposure Limit
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limit
NIOSH - National Institute for Occupational Safety and Health
IDLH - Immediately Dangerous to Life or Health
SKIN: Skin Absorption

Appropriate engineering controls

Engineering Controls
Use general ventilation to maintain airborne concentrations to levels that are below regulatory and recommended occupational exposure limits. Local ventilation may be required during certain operations to maintain concentrations below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels of irritating vapors. Use adequate ventilation and/or engineering controls in high temperature processing to prevent exposure to vapors.

Individual protection measures, such as personal protective equipment

Eye/face Protection
Tight sealing safety goggles. Ensure that eyewash stations and safety showers are close to the workstation location.

Skin Protection
Gloves made of Viton®. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Impervious clothing.

Respiratory Protection
None required if hazards have been assessed and airborne concentrations are maintained below the exposure limits listed in Section 8. Wear an approved air-purifying respirator with organic vapor cartridges and particulate filters where airborne concentrations may exceed exposure limits in Section 8 and/or there is exposure to dust or mists due to sanding, grinding, cutting, or spraying. Use an approved positive-pressure air-supplied respirator with emergency escape provisions if there is any potential for an uncontrolled release, airborne concentrations are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.
General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear Amber</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>Physical State</td>
<td>Viscous liquid</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 93°C / &gt; 200°F</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.08 - 1.12 @ 25°C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble (Water)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Percent Volatile</td>
<td>10 - 25 % by weight</td>
</tr>
<tr>
<td>VOC Content</td>
<td>9 g/l (calculated) product as supplied</td>
</tr>
<tr>
<td>Viscosity</td>
<td>450 - 800 cps @ 25°C</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
No dangerous reaction known under conditions of normal use.

Chemical Stability
Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous polymerization
Polymerization may occur at elevated temperatures.

Conditions to Avoid
Contamination by those materials referred to under Incompatible materials.

Incompatible materials
Incompatible with oxidizing agents.

Hazardous decomposition products
Carbon monoxide. Carbon dioxide (CO2). Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Primary Routes of Entry
Skin Contact, Ingestion, Inhalation, Eye contact

Acute toxicity

<table>
<thead>
<tr>
<th>Substance</th>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>Oral LD50</td>
<td>= 5000 mg/kg (Rat)</td>
</tr>
<tr>
<td></td>
<td>Dermal LD50</td>
<td>= 8390 mg/kg (Rabbit)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= 12124 mg/kg (Rat)</td>
</tr>
</tbody>
</table>
Information on toxicological effects

**Symptoms**
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Eyes**
Causes serious eye irritation.

**Skin**
Irritating to skin. Repeated exposure may cause skin dryness or cracking.

**Inhalation**
Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

**Ingestion**
Ingestion (swallowing) may irritate the mouth, throat and stomach. Ingestion is not an anticipated route of exposure for this material in industrial use.

**Irritation**
May cause irritation.

**Corrosivity**
Not corrosive.

**Sensitization**
Not sensitizing.

**Mutagenic effects**
No information available.

**Carcinogenicity**

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>A4</td>
<td>Not Classifiable as a Human Carcinogen</td>
</tr>
</tbody>
</table>

**Legend**
ACGIH (American Conference of Governmental Industrial Hygienists)

**Reproductive Toxicity**
May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility.

**Neurological effects**
No information available.

**STOT - single exposure**
No information available.

**STOT - repeated exposure**
No information available.

**Target organ effects**
None known.

**Aspiration hazard**
No information available.

The following values are calculated based on chapter 3.1 of the GHS document.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEmix (oral)</td>
<td>24099</td>
</tr>
<tr>
<td>ATEmix (dermal)</td>
<td>40837 mg/kg</td>
</tr>
<tr>
<td>ATEmix (inhalation-dust/mist)</td>
<td>106140.6</td>
</tr>
<tr>
<td>ATEmix (inhalation-vapor)</td>
<td>833.8</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Toluene**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient</td>
<td>2.65</td>
</tr>
<tr>
<td>Algae</td>
<td>EC50 = 12.5 mg/L (Pseudokirchneriella subcapitata) (72h)</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 = 15.22 - 19.05 mg/L (Pimephales promelas) (96 h) flow-through LC50 = 12.6 mg/L (Pimephales promelas) (96 h) static LC50 = 5.89 - 7.81 mg/L (Oncorhynchus mykiss) (96 h) flow-through LC50 = 14.1 - 17.16 mg/L (Oncorhynchus mykiss) (96 h) static LC50 = 5.8 mg/L (Oncorhynchus mykiss) (96 h) semi-static LC50 = 11.0 - 15.0 mg/L (Lepomis macrochirus) (96 h) static LC50 = 54 mg/L (Oryzias latipes) (96 h) static</td>
</tr>
</tbody>
</table>
LC50 = 28.2 mg/L (Poecilia reticulata) (96 h) semi-static
LC50  50.87 - 70.34 mg/L (Poecilia reticulata) (96 h) static
EC50  5.46 - 9.83 mg/L 48 h
EC50 = 11.5 mg/L 48 h

Crustacea

**Persisten/Degradability**
No information available.

**Bioaccumulation**
No information available.

**Other adverse effects**
No information available.

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal Considerations**
NOT A RCRA HAZARDOUS WASTE: When discarded in its purchased form, this material would not be regulated as a RCRA Hazardous waste under 40 CFR 261. Process and waste water containing this material, shall not be discharged to the aquatic environment. Liquid waste must be thermally treated or disposed of in a properly licensed chemical landfill in accordance with local regulations.

**Contaminated packaging**
"Empty containers", as defined under 40 CFR 261.7 or other applicable state or provincial regulations or transportation regulations, are not classified as hazardous wastes. Treatment of empty contaminated containers shall be by thermal means by a reclamation recycling facility or disposed of in a properly licensed chemical landfill.

**US EPA Waste Number**
Not applicable.

### 14. TRANSPORT INFORMATION

**DOT**
Proper shipping name
NOT REGULATED

**TDG**
Proper shipping name
NOT REGULATED

**MEX**
Proper shipping name
NOT REGULATED

**IATA**
Proper shipping name
NOT REGULATED

**IMDG/IMO**
Proper shipping name
NOT REGULATED

### 15. REGULATORY INFORMATION

**International Inventories**

**TSCA Inventory Status:** All components of this material are listed on the US Toxic Substances Control Act (TSCA) inventory. The polymer in this product is subject to a TSCA Significant New Use Rule (SNUR) under 40 CFR § 721.10381.

**Canadian Inventory Status:** This material contains components that are NOT listed on the Canadian Domestic Substances List (DSL)

**Australian Inventory Status:** This product contains one or more chemicals currently not on the Australian Inventory of
Chemical Substances

Korean Inventory Status: This product contains one or more chemicals currently not on the Korean Chemical Substances List

Philippine Inventory: This product contains one or more chemicals currently not on the Philippine Inventory of Chemicals and Chemical Substances

Japan ENCS: This product contains one or more chemicals currently not on the Japanese Inventory of Existing and New Chemical Substances

Chinese IECS: This product contains one or more chemicals currently not on the Chinese Inventory of Existing Chemical Substances

New Zealand Inventory: This product contains one or more chemicals currently not on the New Zealand Inventory of Chemicals

US Federal Regulations

TSCA 12(b) - Export Notification:
This material contains the following substances that are subject to TSCA 12(b):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>TSCA Inventory Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinyl Hybrid Resin</td>
<td></td>
<td>Section 5, 1 % de minimus concentration EPA: EPA-230774</td>
</tr>
</tbody>
</table>

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40 of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>SARA 313 Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>&lt;0.4</td>
<td>Listed</td>
</tr>
</tbody>
</table>

EPCRA: Emergency Planning and Community Right-to-Know Act
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)
This product contains the following listed substances:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td></td>
<td>Listed</td>
<td>Listed</td>
<td>Listed</td>
</tr>
<tr>
<td>108-88-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product contains the following HAPs:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>HAPS data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>&lt;0.4</td>
<td>Listed</td>
</tr>
</tbody>
</table>

CERCLA
This product contains the following reportable quantities:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>40 CFR 302.4 RQ</th>
<th>40 CFR 355 EHS TPQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1000 lb</td>
<td></td>
</tr>
<tr>
<td></td>
<td>454 kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.454 kg</td>
<td></td>
</tr>
</tbody>
</table>

Chemical Weapons Convention (CWC)
This product does not contain any listed substances.

State Regulations

California Proposition 65
WARNING: This material contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. The California Safe Drinking Water and Toxic Enforcement Act of 1986 requires that clear and reasonable
warning be given prior to exposing any person to this chemical.

Canada
This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Rating</th>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Prepared By: Polynt Regulatory Department
Revision Date: 09/Feb/2018
Revision Note: None

Former date: 28 December 2017

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End of Safety Data Sheet

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