



## SAFETY DATA SHEET

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SDS

Product Name: **RS MODULAR POLYURETHANE  
COMPOSITE UTILITY POLES**

Revision Date: 2016-09-12

### Section 1 – Chemical Product and Company Identification

Manufacturer's Name	Telephone Numbers for Emergency
<p><b>RS Technologies Inc.</b> 22 Industrial Park Road Tilbury, ON, Canada N0P 2L0</p> <p><b>Contact Information:</b> +1 519 682 1110 +1 877 219 8002 Hours of Operations: Monday – Friday from 8 am to 4 pm, Eastern Standard Time</p>	<p><b>INFOTRAC</b> (<a href="http://www.infotrac.net">www.infotrac.net</a>) Canada &amp; USA: +1 800 535 5053 International: +1 352 323 3500</p> <p>Hours of Operations: Seven days a week, 24 hours a day.</p>
Product Identifier	Alternative Names
<p>Fibreglass Reinforced Polyurethane Composite Modular Utility Poles</p>	<p>RS Modular Polyurethane Composite Utility Poles Composite Utility Poles Fiber Reinforced Polymer (FRP) Poles Fibreglass Utility Poles Filament Wound Polyurethane Composite Poles RS Utility Poles</p>
Recommended Use	Restrictions on Use
<p>Distribution Poles Transmission Poles Communication Poles Lighting Poles</p>	<p>None</p>

### Section 2 – Hazards Identification

#### Hazard Classification of Substance or Mixture

Within the meaning of the Canada Workplace Hazardous Materials Information System (WHIMS) and United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard [29 CFR 1910.1200HCS] the products listed above are exempt as articles under stated normal condition of use.

#### Label Elements

No labelling elements required



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### Other Hazards

When RS modular utility poles are cut, drilled or subject to other mechanical processing, they may produce dust, which may irritate the eyes, skin and respiratory system.

## Section 3 – Composition / Information on Ingredients

Chemical Name	CAS Number	% by Weight
Fibreglass	65997-17-13	60 - 80
Polyurethane Based Resin	Not applicable	20 - 40

## Section 4 – First-Aid Measures

### Inhalation

Move victim to fresh air. If breathing has stopped, administer Cardio Pulmonary Resuscitation (CPR). Call a physician.

### Skin

Wash effected area with soap and water. Wash contaminated clothing before reuse. Long pants and good personal hygiene will maximize comfort.

### Ingestion

Call a physician or poison control center immediately. If professional advice is not available, DO NOT induce vomiting or give anything by mouth to an unconscious person.

### Eye

Flush eyes with plenty water for 10 minutes and seek immediate medical attention.

### Most Important symptoms and effects, both acute and delayed

Under normal conditions of use, no health effects are expected

### Indication of any immediate medical attention and special treatment needed

Notes to Physician: No specific or treatments recommended related to exposure to this material



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### Section 5 – Fire Fighting Measures

#### Extinguishing Media:

Suitable Extinguishing Media: Normal fire fighting procedures including water, carbon dioxide, dry chemical and foam

Unsuitable Extinguish Media: No data available

#### Specific Hazards arising from the hazardous product

Burning a polyurethane composite utility pole will create acrid heavy black smoke and an offensive odour. All smoke is toxic.

#### Advice for firefighters

Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighter's protective clothing will only provide limited protection.

<b>Flash Point</b> (Method Used): Not applicable	<b>Flammable Limits:</b> Not applicable <b>Lower Explosive Limit:</b> Not applicable <b>Upper Explosive Limit:</b> Not applicable
<b>Extinguishing Media:</b> Normal fire fighting procedures including water, Carbon dioxide, dry chemical and foam.	<b>Special Protective Fire Fighting Information:</b> Burning a polyurethane composite utility pole will create acrid heavy black smoke and an offensive odour. Firefighters must wear self-contained breathing apparatus (SCBA).

### Section 6 – Accident Release Measures

#### Personal precautions, protective equipment and emergency procedures

General measures: Avoid breathing dust

For non-emergency personnel: Use appropriate personal protective equipment (PPE) and evacuate unnecessary personnel.

For emergency personnel: Equip cleanup crew with proper protection. Upon arrival the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area and call for the assistance of trained personnel as soon as conditions permit.



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## Environment precautions

Avoid release to the environment

## Methods and materials for containment and cleaning up

For containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewer and streams

Methods for cleaning up: Clean up spills immediately and dispose of waste safely.

## Section 7 – Handling and Storage

### Precautions for safe handling

After working with composite materials, wash face and hands thoroughly with soap and water before eating, drinking, smoking or using toilet facilities.

### Conditions for safe storage, including any incompatibilities

Store away from open flame, other ignition sources and incompatible materials (see section 10).

## Section 8 – Exposure Controls / Personal Protection

### Control Parameters:

The established exposure limits from appropriate advisory agency including: American Conference of Government Industrial Hygienists (Threshold Limit Values) ACGIH (TLV), National Institute for Occupational Safety and Health (Recommended Exposure Limits) NIOSH (REL), Occupational Safety and Health Administration (Permissible Exposure Limits) OSHA (PEL), and Canadian provincial governments Occupational Exposure Limit (OEL).

Particulates not otherwise classified (PNOC)		
USA ACGIH	ACGIH TLV TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (respirable fraction) 10 mg/m <sup>3</sup> (total dust)
USA OSHA	OSHA PEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (respirable fraction) 15 mg/m <sup>3</sup> (total dust)
Alberta	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (respirable fraction) 10 mg/m <sup>3</sup> (total dust)
British Columbia	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (respirable fraction) 10 mg/m <sup>3</sup> (total dust)



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Manitoba	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (respirable particles, recommended) 10 mg/m <sup>3</sup> (inhalable particles, recommended)
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction) 10 mg/m <sup>3</sup> (particulate matter containing no Asbestos and <1% Crystalline silica, inhalable fraction)
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (respirable particles, recommended) 10 mg/m <sup>3</sup> (inhalable particles, recommended)
Nunavut	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (respirable mass) 10 mg/m <sup>3</sup> (total mass)
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction) 20 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction)
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction) 10 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction)
Ontario	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (respirable) 10 mg/m <sup>3</sup> (inhalable)
Price Edward Island	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (respirable particles, recommended) 10 mg/m <sup>3</sup> (inhalable particles, recommended)
Quebec	VEMP (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (Including dust, inert or nuisance particulates -total dust)
Saskatchewan	OEL TWA (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction) 10 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction)
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction) 10 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction)



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### Appropriate Engineering Controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits haven't been established, maintain airborne levels to an acceptable level.

### Individual Protection Measures

**RESPIRATORY PROTECTION:** A NIOSH/OHS approved N95 or better mask is recommended when machining, cutting, and drilling, etc. composite utility poles. If the applicable TLVs and or PELs are exceeded, use NIOSH/OHS approved respirators with a canister or cartridge.

**VENTILATION:** Use adequate ventilation to control dust when machining, cutting, drilling, etc. Use local exhaust if necessary to prevent nuisance dust. The use of dust collector when sawing or routing to avoid dust inhalation is recommended.

**EYE AND FACE PROTECTION:** Wear goggles or safety glasses with side shields when machining, cutting, drilling, etc. Have eye washes available.

**SKIN PROTECTION/PROTECTIVE GLOVES:** Wear protective gloves, long pants and long sleeves when machining, cutting, drilling, etc. to avoid contact with dust. Wash skin with soap and water after handling. Wash work clothes separately.

## Section 9 – Physical and Chemical Properties

**Appearance:** Solid, Various colours

**Odour:** None

**Odour Threshold:** Not applicable

**pH:** Not applicable

**Melting Point/Freezing Point:** Not applicable

**Initial Boiling Point and Boiling Range:** Not applicable

**Flash Point:** Not applicable

**Solubility in Water:** None



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**Specific Gravity** (H<sub>2</sub>O = 1): 1.9-2.1

**Evaporation Rate** (Butyl Acetate = 1): Not applicable

**Flammability (solid, gas):** Not applicable

**Vapour Density** (Air = 1): Not applicable

**Chemical Formula:** Not applicable

**Vapour Pressure** (mm Hg.): Not applicable

**Relative Density:** 1.9 – 2.1

**Solubility:** Negligible

**Partition Coefficient: n-octanol/water:** Not available

**Auto-ignition Temperature:** Not available

**Decomposition Temperature:** Not available

**Viscosity:** Not applicable

### Section 10 – Stability and Reactivity

**Reactivity:** Hazardous reactions will not occur under normal conditions

**Chemical Stability:** Stable under recommended handling and storage conditions (see Section 7)

**Possible of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Exposure to open constant flames and torching, temperatures more than 250°C [482°F].

**Incompatibility with Other Materials:** Avoid contact with alkali, strong acid or other oxidizers. Contact with these materials may cause swell, degradation of composite poles depending on the contact time.

**Hazardous Decomposition Products:** A fire that burns slowly may produce different products than one that burns quickly. The burning rate also affects the rate at which a fire releases products. Carbon dioxide (CO<sub>2</sub>) and water vapour (H<sub>2</sub>O) are two relatively harmless gases produced by fires. Others can be oxides of carbon and oxides of nitrogen. As fires produce light, heat, and gases, they also produce soot, consisting of mostly carbon particles. Smoke may be defined either as just the soot particles given off by a fire, or as both the soot and the gaseous products of combustion.



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### Section 11 – Toxicological Information

#### Information on Toxicological Effects-Products:

Acute Toxicity: Not available

LD50 and LC50 data: Not Available

Skin corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or skin Sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Specific target organ toxicity (repeated exposure): Not classified

Reproductive Toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries after skin contact: May cause mild skin irritation from operations generating a nuisance dust. The use of gloves, long sleeve shirts and pants may reduce skin exposure.

Symptoms/Injuries after eye contact: May cause mild irritation from operations generating a nuisance dust. The use of safety glasses with side shields or vented safety goggles is recommended for dusty environments.

Symptoms/Injuries after inhalation: May produce low respiratory irritation and coughing from operations generating a nuisance dust. The use of dust masks and a good ventilation system will reduce the exposure.

Symptoms/Injuries ingestion: Not expected to be a primary route of exposure

Chronic Symptoms: This product contains polymers which bind the hazardous components and make inhalation unlikely. If fine dust should be produced, chronic inhalation may cause: reduced lung function and inflammation.





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### Information on Toxicological Effects-Ingredient(s)

CAS-No	Chemical Name	% by weight	OSHA <sup>1</sup>	IARC <sup>2</sup>	NTP <sup>3</sup>
65997-17-13	Fibreglass	60-80%	No	No	No
Not applicable	Polyurethane based resin	20-40%	No	No	No
13463-67-7	Titanium dioxide	<0.15%	No	Group 2B	No
1333-86-4	Carbon black	<0.05%	No	Group 2B	No

<sup>1</sup>Occupational Safety & Health Administration (OSHA)

<sup>2</sup>International Agency for Research on Cancer (IARC) Carcinogen Classifications:  
Group 1-The component is carcinogenic to humans.  
Group 2A-The component is probably carcinogenic to humans.  
Group 2B-The component is possibly carcinogenic to humans.

<sup>3</sup>National Toxicology Program (NTP) Carcinogen Classifications:  
Category I-The component is known to be a human carcinogen.  
Category II-The component is reasonably anticipated to be a human carcinogen.

## Section 12 – Ecological Information

**Ecotoxicity:** Not Classified

**Persistence and degradability:** Not Established

**Bioaccumulative potential:** Not Established

**Mobility in soil:** Not available

**Other Adverse effects:** Not available

## Section 13 – Disposal Considerations

### WASTE DISPOSAL METHOD

Dispose of as solid waste in accordance with local, state and federal regulations. Not considered a hazardous waste under Federal Resource Conservative and Recovery Act (RCRA, 29 CFR 261) regulations.



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### Section 14 – Transport Information

DOT and IATA:

Proper shipping name: Not applicable  
Hazard Class: Not applicable  
DOT hazardous substance: Not applicable  
Label required: Not applicable

### Section 15 – Regulatory Information

This is not a controlled product under WHIMS. This product meets the definition of a “manufactured article” and is not subject to the regulations of the Hazardous Product Act.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by those regulations.

### Section 16 – Other Information

#### Revision History

<b>REVISION EFFECTIVE DATE</b>	<b>SUMMARY OF CHANGES</b>
2010-08-24	Updated as per ECR 1034 Update all the document to comply with the Globally Harmonized System of Classification and Leveling of Chemicals (GHS)
2013-03-25	Removed RStandard References
2014-10-09	Amended respiratory protection, changed Sect 1 address to Tilbury
2016-09-12	Updated the document to comply with WHMIS 2015-Safety Data Sheet (SDS); Added to document control system as C-607.

#### **Disclaimer:**

The above data is accurate to the best of our knowledge. However, since data, safety standards and government regulations are subject to change, and the conditions for use or misuse are beyond our control, RS TECHNOLOGIES DOES NOT WARRANTY, EITHER EXPRESS OR IMPLIED, ABOUT THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN, AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON.

*End of SDS*