

Novawall® EcoTRACK™  
Date Prepared: October 2005  
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Novawall Systems, Inc.  
Material Safety Data Sheet

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## Section 1: Product and Company Identification

Novawall Systems, Inc.  
885-B South Pickett Street  
Alexandria, Virginia 22304

### Phone Numbers:

Emergency Medical (24 Hour) 800-447-4545  
Emergency Transportation/CHEMTREC (24 Hour) 800-424-9300  
Other Emergency Information (24 Hour) 518-475-5222  
Non-Emergency Information 800-695-6682

### Product Identification:

Novawall® EcoTRACK™  
Polyphenylene ether / High Impact Polystyrene and / or Polystyrene blend

### Product Description:

Synthetic thermoplastic polymer

### Product Use:

May be used to produce molded or extruded articles or as a component of other industrial products

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## Section 2: Composition / Information on Ingredients

Components listed below are physical or health hazards as defined in the Hazard Communication Standard. The quantities represent typical or average values for the materials shown. Additional compositional data are provided in Section 15, Regulatory Information, subject to supplier notification requirements.

Component Name	%	CAS Number	OSHA PEL	ACGIH TWA	Recommended Exp. Limits
Carbon Black	0.1 - 1	1333-86-4	3.5 mg/m3 TWA	3.5 mg/m3 TWA	Not Established

Novawall® EcoTRACK™

### Section 3: Hazards Identification

#### Emergency Overview:

- Pellets with slight or no odor
- Spilled material may create slipping hazard
- Can burn in a fire creating dense toxic smoke
- Molten plastic can cause severe thermal burns
- Fumes produced during melt processing may cause eye, skin, and respiratory tract irritation. Severe over-exposure may result in nausea, headache, chills and fever
- Secondary Operations, such as grinding, sanding, or sawing can produce dust which may present an explosion or respiratory hazard

HMIS Ratings: Health = 0, Flammability = 1, Reactivity = 0, PPE = B

#### Potential Health Effects

Ingestion:	No hazard in normal industrial use
Skin Absorption:	No absorption hazard in normal industrial use
Eye Contact:	Can cause mechanical irritation if dusts are generated
Skin Contact:	Unlikely to cause irritation even on repeated contact

#### Chronic / Carcinogenicity

NPT:	Not Tested
OSHA:	Not Regulated
IARC:	Not Listed

Note: OSHA, IARC and/or NTP have listed carbon black and heavy metals, present in some colorants, as carcinogens. If these colorants are present in this product, they are shown in SECTION 2. These colorants are essentially bound to the plastic matrix and are unlikely to contribute to workplace exposure under recommended processing conditions.

Processing fumes may cause irritation to the eyes, skin and respiratory tract. In cases of severe exposure, nausea and headache can also occur.

Grease-like processing fume condensates on ventilation ductwork, molds, and other surfaces can cause injury to skin.

Medical Restrictions: There are no known human health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing vapors.

#### Section 4: First Aid Measures

Eyes:	Immediately flush eyes with plenty of water. Get medical attention if irritation develops or persists. After initial flushing, remove any contact lenses.
Skin:	Wash with soap and water. Get medical attention if irritation develops or persists. For hot product, immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.
Ingestion:	No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop.
Inhalation:	No specific treatment is necessary since this material is not likely to be hazardous by inhalation.
Processing Fumes:	Processing fumes inhalation may be irritating to the respiratory tract. If symptoms are experienced remove victim from the source of contamination or move victim to fresh air and obtain medical advice.

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#### Section 5: Fire Fighting Measures

Fire Fighting:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fire fight from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.
Extinguishing Media:	Water spray and foam. Carbon dioxide and dry chemical are not recommended because of their lack of cooling capacity may permit re-ignition.
Conditions of Flammability:	Requires a continuous flame source to ignite.
Auto ignition Temperature:	490 C (914 F), estimated
Explosion Data:	Material not sensitive to mechanical impact but is sensitive to static discharge under dust cloud conditions.
Hazardous Combustion Products:	Intense heat, smoke, carbon dioxide, carbon monoxide, hydrocarbon fragments

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#### Section 6: Accidental Release Measures

General:	Gather and store in a closed container pending a waste disposal evaluation. Allow molten material to solidify before disposal.
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#### Section 7: Handling and Storage

Handling:	Follow recommendations on a label and in processing guide. Prevent contact with skin and eyes. Use good industrial hygiene practices. Provide adequate ventilation. Secondary operations such as grinding, sanding, or sawing may produce dust explosion hazard. Use aggressive housekeeping activities to prevent dust accumulation: employ bonding, grounding, venting and explosion relief provisions in accordance with accepted engineering practices.
Storage:	Store in a cool dry place. Avoid excessive heat and ignition sources.

### Section 8: Exposure Controls / Personal Protection

Engineering Controls:	A continuous supply of fresh air to the workplace together with removal of processing fumes through exhaust systems is recommended. Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, ductwork, and other surfaces using appropriate personal protection. Local ventilation requirements must be determined to limit exposure to processing fumes in the workplace.
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#### Personal Protection

Eye/Face:	Wear Safety glasses with side shields or chemical goggles. In addition, use full-face shield when cleaning processing fume condensates from hoods, ducts, and other surfaces.
Skin:	When handling pellets or powder, avoid prolonged or repeated contact with skin. Wear long pants, long sleeves, well insulated gloves, and a face shield during melt processing. Appropriate clothing – including chemical resistant gloves – should be worn to prevent contact with processing fumes condensate.
Respiratory:	When using this product at elevated temperatures, implement engineering system, administrative controls, or a respiratory protection program (including a respirator approved for protection from organic vapors, acid gases, and particulate matter) if processing fumes are not adequately controlled or operators experience symptoms of overexposure. If dust or powder is produced from secondary operations such as sawing or grinding, use a respirator approved for protection from that dust.

### Section 9: Physical and Chemical Properties

Physical State:	Solid
Color:	Plastic pellet with slight odor
Odor:	Mild
Melting Point:	This product does not exhibit a sharp melting point but softens gradually over a wide range of temperatures
Vapor Pressure (mmHg):	Negligible
Specific Gravity (Water = 1)	>1
% Volatiles:	Negligible
Evaporation Rate:	Negligible
Octanol / Water Partition Coefficient:	Not established

### Section 10: Stability and Reactivity

Stability:	Stable
Reactivity:	Not reactive under recommended conditions of handling, storage, processing, and use.
Conditions to Avoid:	Do not exceed melt temperature in product literature. In order to avoid auto ignition/hazardous decomposition of hot thick masses of plastic, purging should be collected in small, flat, shapes or thin strands to allow for rapid cooling. Quench in water. Do not allow product to remain in barrel at elevated temperatures for extended periods of time: purge with a general purpose resin. (See Section 8 for respiratory protection advice.)

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## Section 11: Toxicological Information

### Acute Health Hazards

Acute Oral:	Oral LD50 Rat > 15g/kg Oral toxicity is estimated from tests on similar materials.
Acute Dermal:	Processing fumes from PPO resin are not considered toxic. In acute inhalation tests, laboratory rats were exposed to processing fumes at concentrations exaggerating those that would likely occur in workplace situations. During the exposure periods (6 hour duration) signs of eye and nasal irritation were observed. These signs of irritation disappeared shortly after the animals were removed from the exposure chamber. No deaths or signs of toxicity were noted during the fume exposure period. There were no distinct or consistent treatment related tissue or organ changes in the gross necropsies.
Eye Contact:	Product not considered primary eye irritant. When similar products, in finely divided form, were placed into the eyes of rabbits, slight transient redness or discharge occurred. This is consistent with the expected slightly abrasive nature of the resin particles.
Skin Contact:	Product not considered primary skin irritant. Draize Skin Primary Irritation Score (rabbit) for similar products, in finely divided form, for a 24-hour exposure is 0. Not expected to be a skin sensitizer based on results of Modified Buehler Guinea Pig Sensitization Test from similar products. Dermal LD50 (rabbit) > 2g/kg, estimated

### Sub-chronic Health Hazards:

Sub-chronic Toxicity:	In a 13 week dust inhalation study, laboratory rats were exposed to up to 50mg/m <sup>3</sup> PPO dust for 6 hrs/day for 13 weeks with a 13-week non-exposure recovery period. There was no evidence of systemic toxicity at the highest dose. Localized toxicity was observed in the lumps and regional lymph nodes of the 50 mg/m <sup>3</sup> exposure group. These findings decreased in severity in the 7 and 1 mg/m <sup>3</sup> exposure groups. A no adverse effect level for PPO is estimated to be 7 mg/n <sup>3</sup> and a no observable effect level is 1 mg/m <sup>3</sup> .
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### Chronic Health Hazards:

NTP:	Not Tested
OSHA:	Not Regulated
IARC:	Not Tested
Special Studies:	Carbon Black: The International Agency for Research on Cancer (IARC) has determined that carbon black is a class 2B known animal and possible human carcinogen by the route of inhalation. Rats exposed to high doses of carbon black by inhalation developed statistically significant increases in lung fibrosis and lung tumors.

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## Section 12: Ecological Information

General:	This material is not expected to be harmful to the ecology
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### Section 13: Disposal Information

Waste Disposal:	Recycling is encouraged. Landfill or incinerate in accordance with federal, state and local requirements. Collected processing fume condensates and incinerator ash should be tested to determine waste classification.
Possible EPA Waste Codes:	No Data

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### Section 14: Transportation Information

Regulatory Status:	Not Regulated
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### Section 15: Regulatory Information

Toxic Substances Control Act (TSCA):	This product is in compliance with all rules and orders of TSCA.
WHMIS Product Classification:	Not a controlled product.

If any components in this product are SARA 313 listed as reportable, they are shown below. The quantities listed for elements represent typical or average values for compounds containing this element.

Component	Reason Listed	%
No SARA 313-listed chemicals in this product		

If any components in this product are known to the State of California to cause cancer and/or reproductive hazards they are listed below:

Component	Reason Listed	CAS Number	%
Carbon Black	carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size)	1333-86-4	0.1 - 1
Toluene	Developmental toxicity, initial date 1/1/91	108-88-3	0.01 - 0.1

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Abbreviations:

ACGIH: American Conference of Governmental Industrial Hygienists  
CAS: Chemical Abstract Services  
CFR: Code of Federal Regulations  
CPR: Cardiopulmonary Resuscitation  
EPA: Environmental Protection Agency  
HMIS: Hazardous Material Identification System (National Paint and Coatings Association)  
IARC: International Agency for Research on Cancer  
OSHA: Occupational Health and Safety Administration  
NTP: National Toxicology Program  
PEL: Permissible Exposure Limit  
PPE: Personal Protective Equipment  
SARA 313: Superfund Amendments and Reauthorization Act, Section 313  
TLV: Threshold Limit Value  
TSCA: Toxic Substance Control Act  
WHIMIS: Workplace Hazardous Materials Information Systems (Canada)