

**AV-202-NTP MULTIGROUT NTP™****SECTION 1. IDENTIFICATION**

<b>Product Identifier</b>	AV-202-NTP MULTIGROUT NTP
<b>Other Means of Identification</b>	Hydrophilic Grout
<b>Other Identification</b>	HYDROPHILIC POLYURETHANE FOAM
<b>Recommended Use</b>	Industrial Use Only.
<b>Restrictions on Use</b>	None known.
<b>Manufacturer/Supplier Identifier</b>	Avanti International, 822 Bay Star Blvd, Webster, TX, 77598, USA, 281.486.5600, avantigrout.com
<b>Emergency Phone No.</b>	ChemTrec, 800.424.9300
<b>Date of Preparation</b>	April 05, 2018

**SECTION 2. HAZARD IDENTIFICATION**

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

**Classification**

Acute toxicity (Inhalation) - Category 4; Skin irritation - Category 2; Respiratory sensitization - Category 1; Skin sensitization - Category 1; Carcinogenicity - Category 2; Specific target organ toxicity (single exposure) - Category 3; Specific target organ toxicity (repeated exposure) - Category 1

**Label Elements**

Signal Word:

Danger

Hazard Statement(s):

H332	Harmful if inhaled.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351	Suspected of causing cancer.
H372	Causes damage to organs (respiratory system) through prolonged or repeated exposure if inhaled.

Precautionary Statement(s):

Prevention:

P202	Do not handle until all safety precautions have been read and understood.
P201	Obtain special instructions before use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.

P264 Wash hands and skin thoroughly after handling.  
 P272 Contaminated work clothing must not be allowed out of the workplace.  
 P280 Wear protective gloves.  
 P284 Wear respiratory protection (NIOSH approved air-purifying respirator with an organic vapour cartridge).  
 P284 In case of inadequate ventilation wear respiratory protection (NIOSH approved air-purifying respirator with N100, R100, or P100 filter; NIOSH approved air-purifying respirator with an organic vapour cartridge).

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water/  
 Soap

P304 + P341 IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
 P333 + P313 If skin irritation or rash occurs: Get medical advice or attention.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

**Other Hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Polymethylene polyphenyl isocyanate	9016-87-9	23	PMDI	
Propylene carbonate	108-32-7	4	PC	
Toluene-2,4-diisocyanate	584-84-9	0.5	2,4-TDI	

**SECTION 4. FIRST-AID MEASURES**

**First-aid Measures**

**Inhalation**

Remove source of exposure or move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

**Skin Contact**

Avoid direct contact. Wear chemical protective clothing if necessary. Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes.

**Eye Contact**

Avoid direct contact. Wear chemical protective gloves if necessary. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open.

**Ingestion**

Rinse mouth with water.

**Most Important Symptoms and Effects, Acute and Delayed**

If inhaled: can irritate the nose and throat.

**Immediate Medical Attention and Special Treatment**

**Target Organs**

Respiratory system.

**Special Instructions**

Not applicable.

## Medical Conditions Aggravated by Exposure

Asthma, respiratory conditions.

## SECTION 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

#### Unsuitable Extinguishing Media

None known.

### Specific Hazards Arising from the Product

Not sensitive to static discharge.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides; very toxic polycyclic aromatic hydrocarbons.

### Special Protective Equipment and Precautions for Fire-fighters

Knock down vapours or gases with water fog or fine water spray.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Get expert advice. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment.

### Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

### Methods and Materials for Containment and Cleaning Up

Small spills or leaks: stop or reduce leak if safe to do so. Contain and soak up spill with absorbent that does not react with spilled product. Large spills or leaks: dike spilled product to prevent runoff. Get expert advice before treating the spilled product with other chemicals to make it less hazardous. Store recovered product in suitable containers that are tightly-covered.

### Other Information

Contact supplier, local fire and emergency services for help.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Obtain special instructions before use. Prevent skin contact. Do not get in eyes. Prevent uncontrolled release of product. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system). Wear personal protective equipment to avoid direct contact with this chemical. General hygiene considerations: do NOT eat, drink or store food in work areas. Consider using a double locker-shower facility. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

### Conditions for Safe Storage

Store in an area that is: ventilated.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Polymethylene polyphenyl isocyanate	0.005 ppm			0.02 ppm		

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Toluene-2,4-diisocyanate	0.001 ppm	0.005 ppm				
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### Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: Chemical Resistant Gloves: butyl rubber, neoprene rubber, nitrile rubber, Viton®/butyl rubber, Barrier® (PE/PA/PE).

#### Respiratory Protection

Wear a NIOSH approved air-purifying respirator with N100, R100, or P100 filter(s). And wear a NIOSH approved air-purifying respirator with an organic vapour cartridge. Either full-face piece or half-face piece with splash goggles.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	Dark brown viscous liquid. Absorbs moisture from the air. Particle Size: Not available
<b>Odour</b>	Aromatic
<b>Odour Threshold</b>	Not available
<b>pH</b>	5.5 - 7.0
<b>Melting Point/Freezing Point</b>	Not available (melting); Not available (freezing)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	Not available
<b>Relative Density (water = 1)</b>	1.147 at 68 °F (20 °C)
<b>Solubility</b>	Not applicable in water; Moderately soluble in common organic solvents.
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic); 3200 - 6000 centipoises (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Liquid
<b>Molecular Formula</b>	Not applicable
<b>Molecular Weight</b>	Not available
<b>Bulk Density</b>	Not available
<b>Surface Tension</b>	Not available
<b>Critical Temperature</b>	Not available
<b>Electrical Conductivity</b>	Not available
<b>Vapour Pressure at 50 deg C</b>	Not available
<b>Saturated Vapour Concentration</b>	Not available

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## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

None known.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

### Conditions to Avoid

Water, moisture or humidity. Alkaline conditions (high pH).

### Incompatible Materials

Polymerizes on contact with: alkanolamines (e.g. triethanolamine), alcohols (e.g. ethanol), amines (e.g. triethylamine), glycols (e.g. ethylene glycol), water.

Not corrosive to metals.

### Hazardous Decomposition Products

None known.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Skin contact; eye contact; ingestion.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Polymethylene polyphenyl isocyanate	2 mg/L (rat) (aerosol)	> 2000 mg/kg (rat)	> 9400 mg/kg (rabbit)
Propylene carbonate		29100 mg/kg (rat)	> 26400 mg/kg (rabbit)
Toluene-2,4-diisocyanate	0.1 mg/L (rat) (4-hour exposure) (vapour)	6170 mg/kg (rat)	> 16000 mg/kg (rabbit)

Inhalation ATEmix = 6 mg/L (4-hour exposure) (vapour)

### Skin Corrosion/Irritation

May cause mild irritation based on information for closely related chemicals.

### Serious Eye Damage/Irritation

May cause serious eye irritation based on information for closely related materials.

### STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

May be harmful based on information for closely related materials.

#### Skin Absorption

May be harmful based on information for closely related materials.

#### Ingestion

Not harmful based on information for closely related materials.

### Aspiration Hazard

No information was located.

### STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause irritation of the respiratory system. May cause respiratory tract injury. (Toluene-2,4-diisocyanate)

### Respiratory and/or Skin Sensitization

May cause an allergic reaction (skin sensitization) based on information for closely related chemicals. May cause severe asthma-like symptoms (respiratory sensitization) based on information for closely related chemicals.

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(Toluene-2,4-diisocyanate)

### Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Polymethylene polyphenyl isocyanate	Group 3	Not designated	Not Listed	Not Listed
Toluene-2,4-diisocyanate	Group 2B	A3	Reasonably anticipated	Not Listed

### Reproductive Toxicity

#### Development of Offspring

No information was located.

#### Sexual Function and Fertility

No information was located.

#### Effects on or via Lactation

No information was located.

### Germ Cell Mutagenicity

No information was located.

### Interactive Effects

No information was located.

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

No information was located.

#### Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Polymethylene polyphenyl isocyanate		> 500 mg/L (Daphnia magna (water flea))	1640 mg/L (Desmodesmus subspicatus (algae); 72-hour; static)	

### Persistence and Degradability

No information was located.

### Bioaccumulative Potential

No information was located.

### Mobility in Soil

No information was located.

### Other Adverse Effects

There is no information available.

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations.

## SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

### Environmental Hazards

Not applicable

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**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### Canada

##### **Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

All ingredients are listed on the DSL/NDSL.

#### USA

##### **Toxic Substances Control Act (TSCA) Section 8(b)**

All ingredients are listed on the TSCA Inventory.

## SECTION 16. OTHER INFORMATION

**NFPA Rating** Health - 1 Flammability - 1 Instability - 0

**SDS Prepared By** Avanti International

**Date of Preparation** April 05, 2018

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**Revision Indicators** Not applicable.

**Key to Abbreviations** ACGIH® = American Conference of Governmental Industrial Hygienists  
IARC = International Agency for Research on Cancer  
NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health  
OSHA = US Occupational Safety and Health Administration  
RTECS® = Registry of Toxic Effects of Chemical Substances  
NTP = National Toxicology Program

**References** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).  
HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).

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