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# **AV-100® Chemical Grout(Granules)**

# **SECTION 1. IDENTIFICATION**

**Product Identifier** AV-100 Chemical Grout (Granules)

Other Means of Acrylamide Grout

Identification

**Recommended Use** Industrial Use Only.

**Restrictions on Use** None known.

Manufacturer/Supplier Avanti International, 822 Bay Star Blvd, Webster, TX, 77598, USA, 281.486.5600,

**Identifier** avantigrout.com

Emergency Phone No. ChemTrec, 800.424.9300

# **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 (Oral) - Category 3; Acute toxicity (Dermal) - Category 4; Acute toxicity (Inhalation) - Category 4; Skin irritation - Category 2; Eye irritation - Category 2A; Skin sensitization - Category 1; Germ cell mutagenicity - Category 1; Carcinogenicity - Category 1; Reproductive toxicity - Category 2; Specific target organ toxicity (repeated exposure) - Category 1

## **Label Elements**







Signal Word:

Danger

Hazard Statement(s):

H301 Toxic if swallowed.

H312 + H332 Harmful in contact with skin or if inhaled.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H340 May cause genetic defects.

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H402 Harmful to aquatic life.

Precautionary Statement(s):

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash hands and skin thoroughly after handling.

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P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor.

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

Soap

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/attention. P312 Call a POISON CENTRE or doctor if you feel unwell.

P321 Specific treatment (see supplemental first aid instruction on this label).

P330 Rinse mouth.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

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

Storage:

P405 Store locked up.

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
Acrylamide solid	79-06-1	95	AAM	2-Propenamide
Acrylamide, N,N'-methylenebis-	110-26-9	5	MBA	

## **SECTION 4. FIRST-AID MEASURES**

#### **First-aid Measures**

#### Inhalation

Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). 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. Rinse with lukewarm, gently flowing water for 5 minutes. Get medical advice or attention if you feel unwell or are concerned. Safely dispose of contaminated clothing, shoes and leather goods. DO NOT re-use.

## **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

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Rinse mouth with water. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Immediately call a Poison Centre or doctor.

#### **First-aid Comments**

If exposed or concerned, get medical advice or attention.

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# Most Important Symptoms and Effects, Acute and Delayed

Symptoms may include coughing, choking, shortness of breath, difficult or rapid breathing and wheezing.

# **Immediate Medical Attention and Special Treatment**

# **Target Organs**

Nervous system.

# **Medical Conditions Aggravated by Exposure**

Asthma, nervous system conditions, respiratory conditions.

# **SECTION 5. FIRE-FIGHTING MEASURES**

# **Extinguishing Media**

# Suitable Extinguishing Media

Use water to keep non-leaking, fire-exposed containers cool.

# **Unsuitable Extinguishing Media**

None known.

# Specific Hazards Arising from the Product

Closed containers may rupture violently when heated releasing contents.

Corrosive, flammable ammonia; very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides.

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

Evacuate area. Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary. See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

# Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Use the personal protective equipment recommended in Section 8 of this safety data sheet.

# **Environmental Precautions**

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

## Methods and Materials for Containment and Cleaning Up

Avoid generating dust. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Store recovered product in suitable containers that are: covered. Contact emergency services and manufacturer/supplier for advice.

#### **Other Information**

Report spills to local health, safety and environmental authorities, as required.

# **SECTION 7. HANDLING AND STORAGE**

# **Precautions for Safe Handling**

Only use where there is adequate ventilation. Avoid generating dusts. Prevent uncontrolled release of product. Prevent accidental contact with incompatible chemicals. General hygiene considerations: it is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling. Consider using a double locker-shower facility. Do NOT smoke in work areas. Do NOT eat, drink or store food in work areas.

#### **Conditions for Safe Storage**

Store in an area that is: cool, well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity). Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet.

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# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

	ACGIH 1	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA	
Acrylamide solid	0.03 mg/m3 (IFV)		0.3 mg/m3				

## **Appropriate Engineering Controls**

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air.

#### **Individual Protection Measures**

#### **Eye/Face Protection**

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

## **Skin Protection**

Wear a chemical splash suit and respiratory protection. Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: nitrile rubber, neoprene rubber, polyvinyl chloride, polyethylene, butyl rubber, Viton®. Suitable materials are: Barrier® (PE/PA/PE), Tychem® SL (Saranex™).

## **Respiratory Protection**

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

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

# **Basic Physical and Chemical Properties**

**Appearance** White crystalline powder.

Odour Odourless
Odour Threshold Not available
pH Not available

Melting Point/Freezing Point 184 °F (84 °C) (Acrylamide solid) (melting); Not applicable (freezing)

Initial Boiling Point/Range 378 °F (192 °C) (Acrylamide solid)

**Flash Point** 280.4 °F (138.0 °C)

Evaporation Rate Not available Flammability (solid, gas) Not available

Upper/Lower Flammability or

**Explosive Limit** 

Not available (upper); Not available (lower)

Vapour Pressure 0.001 kPa (0.007 mm Hg) at 77 °F (25 °C) (Acrylamide solid)

Vapour Density (air = 1) Not available

Relative Density (water = 1) 1.122 at 68 °F (20 °C) (Acrylamide solid)

**Solubility** 204 g/L (Very soluble) in water; Not available (in other liquids)

Partition Coefficient, Not available

n-Octanol/Water (Log Kow)

**Auto-ignition Temperature** 464 °F (240 °C) (Acrylamide solid)

**Decomposition Temperature** > 185 °F (85 °C)

Viscosity Not available (kinematic); Not available (dynamic)

Other Information

Physical State Solid Molecular Weight 71.08

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## **SECTION 10. STABILITY AND REACTIVITY**

## Reactivity

Can undergo vigorous polymerization.

#### **Chemical Stability**

Normally stable. Unstable under certain conditions - see Conditions to Avoid.

# **Possibility of Hazardous Reactions**

Polymerizes violently in the presence of heat, sunlight.

## **Conditions to Avoid**

Sunlight. Temperatures above 85.0 °C (185.0 °F)

## **Incompatible Materials**

Polymerizes violently on contact with: oxidizing agents (e.g. peroxides).

## **Hazardous Decomposition Products**

Very toxic carbon monoxide, carbon dioxide; corrosive, flammable ammonia; corrosive, oxidizing nitrogen oxides.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

# **Likely Routes of Exposure**

Ingestion; inhalation; skin contact; eye contact.

# **Acute Toxicity**

Oral ATEmix = 181.97 mg/kg

Dermal ATEmix = 1201.05 mg/kg

#### Skin Corrosion/Irritation

Not a skin irritant.

## Serious Eye Damage/Irritation

Animal tests show serious eye irritation.

# STOT (Specific Target Organ Toxicity) - Repeated Exposure

If inhaled and/or swallowed: causes damage to organs effects on the peripheral nervous system.

## Respiratory and/or Skin Sensitization

May cause an allergic reaction (skin sensitization) based on limited evidence.

#### Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Acrylamide solid	Group 2A		Reasonably anticipated	Not Listed

May cause cancer. IARC: Group 2A – Probably carcinogenic to humans. (Acrylamide solid) ACGIH®: A3 – Confirmed animal carcinogen. (Acrylamide solid) NTP: Reasonably anticipated human carcinogen. (Acrylamide solid) Key to Abbreviations

IARC = International Agency for Research on Cancer. Group 2A = Probably carcinogenic to humans. ACGIH® = American Conference of Governmental Industrial Hygienists. A3 = Animal carcinogen. NTP = National Toxicology Program. Reasonably anticipated = Reasonably anticipated human carcinogen.

# **Reproductive Toxicity**

# **Sexual Function and Fertility**

If swallowed: animal studies show effects on sexual function and/or fertility. Has been associated with: reduced male fertility. (Acrylamide solid)

## **Germ Cell Mutagenicity**

Causes mutagenicity in in vitro tests. (Acrylamide solid)

No information was located for: STOT (Specific Target Organ Toxicity) - Single Exposure, Aspiration Hazard, Development of Offspring, Effects on or via Lactation, Interactive Effects

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# **SECTION 12. ECOLOGICAL INFORMATION**

## **Ecotoxicity**

No information was located.

## **Acute Aquatic Toxicity**

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Acrylamide solid	100-162 mg/L (96-hour)	98-98 mg/L (48-hour)		
Acrylamide, N, N'-methylenebis-	> 100			

# Persistence and Degradability

Degrades rapidly based on quantitative tests.

#### **Bioaccumulative Potential**

Fish Bioconcentration Factor: 1.65. (Acrylamide solid) this product or its degradation products are expected to bioconcentrate in aquatic organisms. (Acrylamide solid) bioaccumulation: 710 µg/l (72 hr), Oncorhynchus mykiss. (Acrylamide solid)

# **Mobility in Soil**

Studies are not available.

#### 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. Empty containers retain product residue. Follow label warnings even if container appears to be empty. Do not reuse empty containers.

# **SECTION 14. TRANSPORT INFORMATION**

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	2074	Acyrlamide, Solid (Acrylamide solid)	6.1	III
US DOT	2074	Acyrlamide, Solid (Acrylamide solid)	6.1	III

Environmental

Not applicable

**Hazards** 

Special Precautions

Not applicable

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

Not applicable

**Other Information** 

NMFC (National Motor Freight Carriers)

Freight Class: 77.5

# **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.

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# **CEPA - National Pollutant Release Inventory (NPRI)**

Part 1A. (Acrylamide solid)

**USA** 

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

All ingredients are listed on the TSCA Inventory.

**Additional USA Regulatory Lists** 

CERCLA: 5000 lbs. (Acrylamide solid)

# **SECTION 16. OTHER INFORMATION**

NFPA Rating Health - 2 Flammability - 1 Instability - 2

Based on Acrylamide solid

SDS Prepared ByAvanti InternationalDate of PreparationMarch 28, 2018Date of Last RevisionMay 07, 2018Revision IndicatorsNot applicable.

Key to Abbreviations ACGIH® = American Conference of Governmental Industrial Hygienists

NFPA = National Fire Protection Association NIOSH = National Institute for Occupational

Safety and Health

NTP = National Toxicology Program

OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances

**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

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Health and Safety (CCOHS).

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