AV-100 CHEMICAL GROUT (Granules)
SAFETY DATA SHEET
Date Issued: 06/01/2015

Section 1: Identification

GHS Product Identifier: AV-100 Chemical Grout (Granules)
Classification: Chemically Activated Gel
Product Use: Industrial Use Only

Supplier
Avanti International
1100 Hercules Ave., Suite 320
Houston, TX 77058
Phone: 800.877.2570
Fax: 281.486.7300

24 HR. EMERGENCY TELEPHONE NUMBER
Chemtrec: 800.424.9300

Section 2: Hazards Identification

GHS Classification

Hazard Class	Category	
Acute tox.	3	Acute Toxicity (Oral)
Acute tox.	4	Acute Toxicity (Inhalation)
Acute tox.	4	Acute Toxicity Inhalation (Dust/Mists)
Skin irrit.	2	Skin Corrosion/Irritation
Eye irrit.	2A	Eye Irritation/Damage
Skin sens.	1	Skin Sensitization
Muta.	1	Germ Cell Mutagenicity
Carc.	1	Carcinogenicity
Repro.tox.	2	Reproductive Toxicity
STOT RE	1	Specific target organ toxicity (Oral) – Peripheral Nervous System
Acute aq.	3	Acute aquatic toxicity

GHS Label Elements
Hazard pictograms:

Signal Word:	Danger
Hazards Statements:	
H301	Toxic if swallowed.
H312	Harmful in contact with skin.
H315	Causes Skin Irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
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 Statements:	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/gas/mist/vapors.
P264	Wash hands, face and any exposed skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face.
	Response:
P301 + P310	IF SWALLOWED: immediately call a poison center or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
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 center or doctor/physician if you feel unwell
P321	Specific treatment (see first aid instructions)
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.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash before reuse.
	Storage:
P405	Store locked up.
	Disposal:
P501	Dispose of contents and container in accordance with existing federal, state, and local environmental control laws.

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

Unknown Toxicity

Part of the mixture consists of ingredient(s) of unknown toxicity.

Section 3: Composition/Information on Ingredients

Weight %	Components	CAS-No.	Classification
60 - 100	Acrylamide	79-06-1	Acute toxicity Category 3 - Oral. Acute toxicity Category 4 – Dermal Acute toxicity Category 4 - Inhalation 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. Acute aquatic toxicity Category 3.
Trade Secret	Proprietary	CAS # is a Trade Secret	Acute toxicity Category 4 – Dermal

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

Section 4: First-Aid Measures

Description of First-Aid Measures

General advice:
Show this safety data sheet to the doctor in attendance. Remove contaminated clothing.

If inhaled:
Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:
Wash off immediately with soap and plenty of water for at least 15 minutes. If symptoms persist, call a physician. May cause an allergic skin reaction.

If in eyes:
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.

If swallowed:
Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention.

Most important Symptoms and effects, both acute and delayed:
Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes. Hives.

Notes to Physician:
May cause sensitization of susceptible persons. Treat symptomatically.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:	Dry chemical, Carbon dioxide (CO_2), Foam.
Unsuitable Extinguishing Media:	Use of water spray when fighting fire may be inefficient.
Fire-fighting Procedure	Firefighters should wear NFPA compliant structural firefighting protective equipment, including self-contained breathing apparatus and NFPA compliant helmet, hood, boots and gloves. Avoid contact with product. Decontaminate equipment and protective clothing prior to reuse.
Hazardous Decomposition Products	By Fire and High Heat: Carbon dioxide (CO_2), carbon monoxide (CO), oxides of nitrogen (NOx)
Unusual Fire/Explosion Hazards	None

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures
Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Avoid generation of dust. Do not breathe dust. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental Precautions

Do not discharge into drains/surface waters/groundwater.

Methods and Material for Containment and Cleaning-Up
Dry: Collect/contain granules and spray area with water.
Catalyzed/mixed liquid: Do not allow to dry. Dam up. Take up mechanically and collect in small suitable containers and cure with oxidizer. Spray spill area with potassium persulfate and sodium metabisulfite solutions to neutralize any possible remaining acrylamide. Do now allow material to contaminate surface or ground water. Prevent product from entering drains.

Section 7: Handling and Storage

Precautions for Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe dust. Avoid generation of dust.

Conditions for Safe Storage (Including Any Incompatibilities)

Segregate from foods and animal feeds. Segregate from acids, bases and oxidizing agents.
Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE), Stainless steel 1.4301 (V2)
Further information on storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from moisture. Store away from other materials. Store locked up.
Storage stability:
Storage temperature: 45-95 °F
Protect against moisture.

Section 8: Exposure Controls/Personal Protection

Components with Occupational Exposure Limits

Acrylamide	OSHA PEL	CLV 0.03 mg/m^3
	ACGIH TLV	TWA 0.3 mg/m^3;

Advice on system design:

Provide local exhaust ventilation to control dust/vapors/mists.

Personal Protective Equipment

Respiratory Protection:

If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved full-face piece respirator, half–face piece respirator with splash goggles, or powered, filtered air-supplied hood.

Skin Protection:

Chemical resistant protective gloves, Suitable materials, chloroprene rubber (Neoprene), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, fluoroelastomer (Viton), nitrile rubber (Buna N) and chemical suit (Tychem or equivalent).

Eye Protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

General Safety and Hygiene Measures:

Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible. Observe the appropriate PEL value. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

Section 9: Physical and Chemical Properties

Appearance: White, crystalline granules
Odor: odorless
Odor Threshold: Not determined
pH: Not determined
Melting Point: 185°F (85°C)
Boiling Point: 257°F (125°C)
Flashpoint: 280°F (138°C)
Evaporation Rate: Not determined
Flammability: Not flammable
Lower Explosion Limits: Not determined
Upper explosion limits: Not determined
Vapor Pressure: 0.01 mmHg @ 20°C (68°F)
Vapor Density: 2.45 (air=1)
Relative Density: 1.122 @ 72˚(22˚C) ± 3%
Solubility in Water: 200g/100g water @ 20°C (68°F)
Partition Coefficient n-octanol/water: Not determined
Auto-ignition Temperature: 464°F (240°C)
Decomposition Temperature: Not determined
Viscosity: Granules (solid)

Section 10: Stability and Reactivity

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
Light Sensitive. May polymerize on exposure to light. The solid is stable at room temperature but may polymerize violently on melting or when heated above 38 ˚C. Reacts spontaneously with hydroxyl-, amino-, and sulfhydryl-containing compounds. Reacts vigorously with acids, bases producing ammonia salts and acrylic acid. Spontaneous polymerization does not readily occur, but requires the presence of dimethylaminopropionitrile (DMAPN) or Triethanolamine (TEA) catalyst and ammonium persulfate. Also, Acrylamide may polymerize upon contact with oxidizing materials e.g. peroxides.

Conditions to avoid
Excess heat, dust generation, incompatible materials.

Incompatible materials
Reactive with oxidizing agents, acids, alkalis, moisture, copper, brass, aluminum, iron and iron salts. Free radical initiators.

Hazardous decomposition products
Decomposition products:
Hazardous decomposition products: carbon monoxide, carbon dioxide and nitrogen oxide

Section 11: Toxicological Information

Primary routes of exposure
Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact.

Acute Toxicity/Effects
Acute toxicity

Oral
Information on: Acrylamide
Type of value: LD50
Species: Mouse (male/female)
Value: 107 mg/kg
Literature Data

Inhalation
Information on: Acrylamide
Type of value: LC50
Species: Rat (male/female)
Value: >1,500 mg/m^3
Literature Data

Dermal
Information on: Acrylamide
Type of value: LD50
Species: Rabbit (male/female)
Value: 1,141 mg/kg
Literature Data

Assessment Other Acute Effects
No data available

Irritation / Corrosion
Assessment of irritating effects: Irritating to eyes.

Skin
Information on: Acrylamide
Species: Rabbit
Result: Not irritating.
Literature Data

Eye
Information on: Acrylamide
Species: Rabbit
Result: Irritating.
Literature Data

Sensitization
Information on: Acrylamide
Species: Guinea Pig
Result: May cause allergic skin reaction
Literature Data

Chronic Toxicity/Effects
Repeated Dose Toxicity
Assessment of repeated dose toxicity: Oral - Causes damage to organs through prolonged or repeated exposure. - Peripheral nervous system.
Literature Data.

Genetic Toxicity
Assessment of mutagenicity: The substance was mutagenic in vivo test. May alter genetic material.
Literature Data.

Carcinogenicity
Assessment of carcinogenicity: This product is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen (Acrylamide)

IARC: 2A - Group 2A: Probably carcinogenic to humans (Acrylamide)
NTP: Reasonably anticipated to be a human carcinogen (Acrylamide)
OSHA: No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Literature Data

Reproductive toxicity
Assessment of reproduction toxicity: Animal testing did not show any effects on fetal development. (Acrylamide)
May cause reproductive disorders. Suspected human reproductive toxicant (Acrylamide)
Literature data.

Teratogenicity
Assessment of teratogenicity: No data available

Development
No data available

Additional Information
Acrylamide toxicity is manifested as a sensorimotor peripheral neuropathy. Drowsiness, loss of balance, confusion.
Liver - Irregularities - Based on Human Evidence
Liver - Irregularities - Based on Human Evidence (Acrylamide).
Literature Data

Section 12: Ecological Information

Toxicity
Aquatic Toxicity
Assessment of aquatic toxicity: The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to fish
Information on: Acrylamide
LC50 (96 h) 90 mg/l, Pimephales promelas (static)

Aquatic invertebrates
Information on: Acrylamide
EC50 (48 h) 160 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Microorganisms/Effect on Activated Sludge
Toxicity to Microorganisms
OECD Guideline 209 static activated sludge/EC20 (180 min): > 100 mg/l
Nominal concentration. The product has not been tested.
The statement has been derived from substances/products of a similar structure or composition.

Persistence and Degradability
Assessment Biodegradation and Elimination (H2O)
100% readily biodegradable (Acrylamide). The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Bioaccumulation Potential
Bioaccumulation : 710 µg/l (72h), Oncorhynchus mykiss (Acrylamide)
Bioconcentration factor: 1.65 (Acrylamide)
The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Mobility in soil
Assessment transport between environmental compartments
No data available.

Additional information
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.

Section 13: Disposal Considerations

Dispose of in accordance with local, state, and federal regulations.

Section 14: Transport Information

DOT (Department of Transportation)
Proper Shipping Name: Acrylamide, solid
Hazard Class: 6.1
UN Number: 2074
Packing Group: III
Label: Toxic or Poison 6.1
Placard: Toxic or Poison 6.1
NMFC (National Motor Freight Carriers)
Freight Class: 77.5

Section 15: Regulatory Information

EPCRA 302:
CAS Number Chemical name
79-06-1 Acrylamide
EPCRA 311/312 (hazard categories): Acute; Chronic
EPCRA 313:
CAS Number Chemical name
79-06-1 Acrylamide
CERCLA RQ CAS Number Chemical name
5000 lbs. 79-06-1 Acrylamide
State regulations
State RTK CAS Number Chemical name
MA, NJ, PA 79-06-1 Acrylamide
CA Prop. 65:
CAS Number Chemical name
79-06-1 Acrylamide
WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:
Health : 3 - Fire: 1 - Reactivity: 2 - Special:
HMIS III rating
Health: 2* - Flammability: 1 - Physical hazard:1
(* Chronic Health Hazard)

Section 16: Other Information

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