

AV-100® Chemical Grout (Liquid)

SECTION 1. IDENTIFICATION

Product Identifier	AV-100® Chemical Grout (Liquid)
Other Means of Identification	Acrylamide grout solution
Recommended Use	Industrial Use Only.
Restrictions on Use	Not for use in food applications.
Manufacturer/Supplier	Avanti International, 822 Bay Star Blvd, Webster, TX, 77598, USA, 281.486.5600,
Emergency Phone No.	ChemTrec 800.424.9300
Date of Preparation	February 28, 2018
Date of Last Revision	May 23, 2023

SECTION 2. HAZARD IDENTIFICATION

Classification: Acute toxicity (Oral) - 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; Aquatic hazard (Acute) - Category 3

Label Elements

Hazard pictogram:



Signal word:

Danger

Hazard statements:

H302 Harmful if swallowed.
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 (respiratory system) through prolonged or repeated exposure if inhaled and/or swallowed.

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/fume/gas/mist/vapors/spray.
P264 Wash hands and skin thoroughly after handling.
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.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response: P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
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 or attention.
P312 Call a POISON CENTRE or doctor if you feel unwell.
P333 + P313 If skin irritation or rash occurs: Get medical advice or attention.
P337 + P313 If eye irritation persists: Get medical advice or 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

Other hazards: None known

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Acrylamide solid	79-06-1	Min. 36*	AAM	2-Propenamamide
Acrylamide, N,N'-methylenebis-	110-26-9	Max. 2*	MBA	

* Concentration range +/- 0.2%

Occupational exposure limits, if available, are listed in section 8.

SECTION 4. FIRST AID MEASURES

First Aid Measures

General advice: Get medical advice or attention if you feel unwell or are concerned.
Eye contact: Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice or attention.
Skin contact: Avoid direct contact. Wear chemical protective clothing if necessary. Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. If skin irritation or a rash occurs, get medical advice or attention.
Inhalation: Remove source of exposure or move to fresh air. Get medical advice or attention if you feel unwell.
Ingestion: Rinse mouth with water. Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

Symptoms may include coughing, shortness of breath, difficult breathing, and tightness in the chest. Can harm the nervous system. May cause mild irritation.

Immediate Medical Attention and Special Treatment

Target organs: Nervous system

Special instructions: Not applicable.

Medical Conditions: None known.

Aggravated by Exposure

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing Media

Suitable: Not combustible. Use extinguishing agent suitable for surrounding fire.
Unsuitable: None known.

Specific Hazards Arising from the Product

This product presents no unusual hazards in a fire situation.
In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides.

Special Protective Equipment and Precautions for Firefighters

Protective equipment: Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

Special firefighting procedures: Evacuate area. Fight fire from a safe distance or a protected location.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

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. Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel.

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

Methods and Materials for Containment and Cleaning Up

Large spill or leaks Dike spilled product to prevent runoff. Cure spilled material with oxidizer.

Other Information

Report spills to local health, safety, and environmental authorities, as required. Contact supplier, local fire, and emergency services for help.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Obtain special instructions before use. Do not breathe in this product. Avoid repeated or prolonged skin contact. Do not get in eyes. Do not swallow. Avoid generating vapors or mists. Prevent uncontrolled release of product. Wear personal protective equipment to avoid direct contact with this chemical. Keep containers tightly closed when not in use or empty. General hygiene considerations: it is good practice to avoid breathing product; avoid skin and eye contact and wash hands after handling. Do NOT smoke in work areas. Do NOT eat, drink, or store food in work areas. Remove contaminated clothing and protective equipment before entering eating areas or leaving work area. Consider using a double locker-shower facility. Clean clothing, shoes, and leather goods.

Conditions for safe storage:

Store in an area that is: cool, well-ventilated, and 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. Comply with all applicable health and safety regulations, fire and building codes.

Incompatible materials

None known.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	STEL	8-hr TWA	TWA
Chemical Name						
Acrylamide solid	0.03 mg/m ³ (IFV)		0.3 mg/m ³			

Appropriate engineering controls: Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eyes/face protection: Wear chemical safety goggles and face shield when contact is possible.

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

Body protection: Chemical Resistant Gloves: Suitable materials are butyl rubber, nitrile rubber, polyethylene, polyvinyl chloride, Viton®. Chemical Resistant Suit: Suitable materials are Barrier® (PE/PA/PE), Tychem® SL (Saranex™).

Respiratory protection: Wear a NIOSH approved air-purifying respirator with an organic vapor 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

Appearance: Clear liquid

Odor: Odourless

Odor threshold: Not available

pH: 6.0 – 8.0; neutral

Melting/freezing point: 43 °F (6 °C) (melting); 43 °F (6 °C) (freezing)

Initial boiling point and boiling range: 212 °F (100 °C)

Flash point: Not applicable

Flash point method: Not applicable

Evaporation rate: Not available

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

Upper/lower flammability or explosive limits: Not available (upper); Not available (lower)

Vapor pressure: 15.2 mm Hg (2.0 kPa) at 68 °F (20 °C)

Vapor density (air=1): Not applicable

Relative density (water=1): 1.03 at 77 °F (25 °C)

Solubility: Soluble in all proportions in water; Not available (in other liquids)

Partition coefficient n-octanol/water: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

Viscosity: Not available (kinematic); 1 - 5 centipoises at 77 °F (25 °C) (dynamic)

Other Information

Physical State: Liquid
Vapor Pressure at 122°F (50°C) Not available

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: None expected under normal conditions of storage and use.
Conditions to avoid: Sunlight. Temperatures above 85.0 °C (185.0 °F)
Incompatible materials: Polymerizes on contact with oxidizing agents (e.g. peroxides). Not corrosive to metals.
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; skin absorption; inhalation; eye contact.

Product Name	LC50	Oral ATEmix*	Dermal ATEmix**
AV-100 Chemical Grout, liquid	N/A	479.57 mg/kg	3169.44 mg/kg

*0% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (oral)

**2% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (dermal)

Skin corrosion or irritation: Not a skin irritant.
Serious eye damage or irritation: Animal tests show mild irritation. (Acrylamide solid)
Respiratory sensitization: May cause an allergic reaction (skin sensitization) based on limited evidence. (Acrylamide solid)
Germ cell mutation: Causes mutagenicity in in vitro tests. (Acrylamide solid)
Carcinogenicity:

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

Reproductive toxicity: Development of Offspring: Animal studies show effects on the offspring. (Acrylamide solid)
Sexual Function and Fertility: Animal studies show effects on sexual function and/or fertility. Has been associated with: reduced male fertility. (Acrylamide solid)
Effects on or via Lactation: No information was located.
Aspiration hazard: No information was located.

Specific Target Organ Toxicity

Single exposure: Inhalation: No information was located.
Skin Absorption: No information was located.
Ingestion: No information was located.
Repeated exposure: Causes effects on the peripheral nervous system. (Acrylamide solid)

Other information No information was located for: STOT (Specific Target Organ Toxicity) - Single Exposure, Aspiration Hazard

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Data

No information was located.

Acute Aquatic Toxicology

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: No ingredient of this product or its degradation products is known to be highly persistent.

Bioaccumulative potential: Fish Bioconcentration Factor: 1.65 bioaccumulation: 710 µg/l (72 hr), Oncorhynchus mykiss. (Acrylamide solid)

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

Consult your local or regional authorities.

Refer to section 7 for handling precautions and to section 8 for information on personal protective equipment.

SECTION 14. TRANSPORT INFORMATION

Regulatory Information

	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group	EmS
US DOT	3426	Acrylamide, Solution	6.1	III	
Canadian TDG	3426	Acrylamide, Solution	6.1	III	
IMDG	3426	Acrylamide, Solution	6.1	III	F-A, S-A
IATA	3426	Acrylamide, Solution	6.1	III	

Environmental Hazards Not applicable.

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

United States

SARA Title III section 302/313

The following ingredients are subject to reporting levels established by SARA Title III, Section 302: Acrylamide, CAS-No.79-06-1, 36%

The following components are subject to reporting levels established by SARA Title III, Section 313: Acrylamide, CAS-No.79-06-1, 36%

SARA Title III - Section 311/312:

Acute, Chronic Acrylamide, CAS-No.79-06-1

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)

California Proposition 65: CAS: 79-06-1. (Acrylamide solid) Warning: This product contains a chemical(s) known to the state of California to cancer and birth defects or other reproductive; Massachusetts Right To Know: New Jersey Right To Know: Pennsylvania Right To Know: CAS: 79-06-1. (Acrylamide solid)

Canada

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

All ingredients are listed on the DSL/NDSL.

CEPA - National Pollutant Release Inventory (NPRI)

Part 1A

SECTION 16. OTHER INFORMATION

NFPA Rating:	Health – Not assigned	Flammability - 0	Instability - 0
SDS Prepared By:	Avanti International		
Date of Preparation:	February 28, 2018		
Date of Last Revision:	May 23, 2023		
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	
	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. NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA").