

AV-620 Slow Surelift™ Part A

SECTION 1. IDENTIFICATION

| | |
|---|---|
| Product Identifier | AV-620 Slow Surelift™ Part A |
| Other Means of Identification | Hydrophobic Grout |
| Recommended Use | Industrial Use Only. |
| Restrictions on Use | Not applicable. |
| Manufacturer/Supplier Identifier | Avanti International, 822 Bay Star Blvd, Webster, TX, 77598, USA, 281.486.5600, avantigrout.com |
| Emergency Phone No. | ChemTrec, 800.424.9300 |
| Date of Preparation | April 30, 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; Eye irritation - Category 2B; Respiratory sensitization - Category 1; Skin sensitization - Category 1B; Specific target organ toxicity (single exposure) - Category 3; Specific target organ toxicity (repeated exposure) - Category 2

Label Elements



Signal Word:

Danger

Hazard Statement(s):

| | |
|------|--|
| H332 | Harmful if inhaled. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H320 | Causes eye irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

Precautionary Statement(s):

Prevention:

| | |
|------|---|
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands and skin thoroughly after handling. |
| 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. |
| P284 | In case of inadequate ventilation wear respiratory protection (NIOSH approved air-purifying respirator) |

with an organic vapour cartridge).

Response:

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.

P314 Get medical advice or attention if you feel unwell.

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

P337 + P313 If eye irritation persists: 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

Not applicable.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | % | Other Identifiers | Other Names |
|-------------------------------------|-----------|----|-------------------|-------------|
| Polymethylene polyphenyl isocyanate | 9016-87-9 | 50 | PMDI | |
| 4,4'-Methylenediphenyl diisocyanate | 101-68-8 | 50 | 4,4-MDI | |

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. If skin irritation or a rash occurs, get medical advice or attention. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

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. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice or attention.

Ingestion

Rinse mouth with water. Call a Poison Centre or doctor if you feel unwell.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

If inhaled: can irritate the nose and throat. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest.

Immediate Medical Attention and Special Treatment

Product Identifier: AV-620-Slow Surelift™ Part A - Ver. 1

Date of Preparation: April 30, 2018

Date of Last Revision: May 15, 2018

Page 02 of 07

Target Organs

Respiratory system, skin.

Special Instructions

Monitor cardiovascular function.

Medical Conditions Aggravated by Exposure

Respiratory conditions, asthma, dermatitis.

SECTION 5. FIRE-FIGHTING MEASURES**Extinguishing Media****Suitable Extinguishing Media**

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

Not applicable.

Specific Hazards Arising from the Product

Closed containers may rupture violently when heated releasing contents.

Very toxic carbon monoxide, carbon dioxide; extremely hazardous hydrogen cyanide; corrosive, oxidizing nitrogen oxides; very toxic polycyclic aromatic hydrocarbons.

Special Protective Equipment and Precautions for Fire-fighters

Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. Before entry, especially into confined areas, use an appropriate monitor to check for: toxic gases or vapours.

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

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. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. It is good practice to prevent releases into the environment.

Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product. Knock down vapour with fog or fine water spray. Remove or recover liquid using pumps or vacuum equipment. Flush spill area. Dike and recover contaminated water for appropriate disposal. Store recovered product in suitable containers that are: covered.

Other Information

Contact supplier, local fire and emergency services for help.

SECTION 7. HANDLING AND STORAGE**Precautions for Safe Handling**

Do not breathe in this product. Prevent skin contact. Do not get in eyes, on skin or on clothing. Avoid generating vapours or mists. 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. Keep containers tightly closed when not in use or empty. General hygiene considerations: do NOT smoke in work areas. 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

Product Identifier: AV-620-Slow Surelift™ Part A - Ver. 1

Date of Preparation: April 30, 2018

Date of Last Revision: May 15, 2018

Page 03 of 07

Store in an area that is: cool, 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 | | |
| 4,4'-Methylenediphenyl diisocyanate | 0.005 ppm | | | 0.02 ppm | | |

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. Wear a chemical splash suit and respiratory protection.

Suitable materials are: Chemical Resistant Gloves: neoprene rubber, nitrile rubber, polyvinyl chloride, butyl rubber, Viton®/butyl rubber. Chemical Resistant Suit: Barrier® (PE/PA/PE), Silver Shield®, Saranex®.

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

| | |
|--|---|
| Appearance | Dark brown liquid. Particle Size: Not available |
| Odour | Aromatic |
| Odour Threshold | Not applicable |
| pH | Not available |
| Melting Point/Freezing Point | Not available (melting); < -2 °F (-19 °C) (freezing) |
| Initial Boiling Point/Range | 392 °F (200 °C) |
| Flash Point | 392 °F (200 °C) |
| Evaporation Rate | Not available |
| Flammability (solid, gas) | Not available |
| Upper/Lower Flammability or Explosive Limit | Not available (upper); Not available (lower) |
| Vapour Pressure | 0.00001 mm Hg (0.00000 kPa) at 68 °F (20 °C) |
| Vapour Density (air = 1) | Not available |
| Relative Density (water = 1) | 1.22 at 77 °F (25 °C) |
| Solubility | Practically insoluble in water; Highly soluble in aromatic hydrocarbons (e.g. toluene). |
| Partition Coefficient, n-Octanol/Water (Log Kow) | Not available |
| Auto-ignition Temperature | Not available |
| Decomposition Temperature | Not available |
| Viscosity | Not available (kinematic); 200 centipoises at 77 °F (25 °C) (dynamic) |

Other Information

Product Identifier: AV-620-Slow Surelift™ Part A - Ver. 1
Date of Preparation: April 30, 2018
Date of Last Revision: May 15, 2018

| | |
|---------------------------------------|---------------|
| Physical State | Liquid |
| Molecular Formula | Not available |
| Molecular Weight | Not available |
| Surface Tension | Not available |
| Critical Temperature | Not available |
| Electrical Conductivity | Not available |
| Vapour Pressure at 50 deg C | Not available |
| Saturated Vapour Concentration | Not available |

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Self-reactive.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Polymerizes in the presence of alkaline conditions (high pH), water or humidity. Releases a large amount of heat and pressure. Container may burst.

Conditions to Avoid

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

Incompatible Materials

Polymerizes on contact with: alcohols (e.g. ethanol), alkanolamines (e.g. triethanolamine), amines (e.g. triethylamine), glycols (e.g. ethylene glycol), reducing agents (e.g. hydroquinone), water.
Not corrosive to metals.

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; extremely hazardous hydrogen cyanide; corrosive, oxidizing nitrogen oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact.

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) |
| 4,4'-Methylenediphenyl diisocyanate | 2 mg/L (rat) (aerosol) | > 2000 mg/kg (rat) | > 9400 mg/kg (rabbit) |

Skin Corrosion/Irritation

Animal tests show moderate or severe irritation.

Serious Eye Damage/Irritation

Animal tests show very mild irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

No information was located.

Skin Absorption

No information was located.

Ingestion

Product Identifier: AV-620-Slow Surelift™ Part A - Ver. 1
Date of Preparation: April 30, 2018
Date of Last Revision: May 15, 2018

May be harmful based on animal tests. May cause irritation of the mouth, throat and stomach.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Causes lung injury.

Respiratory and/or Skin Sensitization

Respiratory sensitizer. Skin sensitizer.

Carcinogenicity

| Chemical Name | IARC | ACGIH® | NTP | OSHA |
|-------------------------------------|---------|----------------|------------|------------|
| Polymethylene polyphenyl isocyanate | Group 3 | Not designated | Not Listed | Not Listed |
| 4,4'-Methylenediphenyl diisocyanate | Group 3 | Not designated | Not Listed | 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

Not harmful to aquatic life, based on acute toxicity tests.

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) | |
| 4,4'-Methylenediphenyl diisocyanate | | > 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

This product and its degradation products are not expected to bioaccumulate.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

Product Identifier: AV-620-Slow Surelift™ Part A - Ver. 1

Date of Preparation: April 30, 2018

Date of Last Revision: May 15, 2018

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations. Treat waste in an approved waste disposal facility.

SECTION 14. TRANSPORT INFORMATION

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

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

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 - 2 Flammability - 1 Instability - 1

SDS Prepared By Avanti International

Date of Preparation April 30, 2018

Date of Last Revision May 15, 2018

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. 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).

Product Identifier: AV-620-Slow Surelift™ Part A - Ver. 1

Date of Preparation: April 30, 2018

Date of Last Revision: May 15, 2018