# Safety Data Sheet

# AV-202-LV Multigrout LV™

## SECTION 1. IDENTIFICATION

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| **Product Identifier** | AV-202-LV Multigrout LV™ |
| **Other Means of Identification** | Hydrophilic grout |
| **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, |
| **Emergency Phone No.** | ChemTrec 800.424.9300 |
| **Date of Preparation** | April 5, 2018 |
| **Date of Revision** | November 27, 2023 |

## SECTION 2. HAZARD IDENTIFICATION

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

Classification: Acute toxicity (Inhalation) - Category 4; Skin irritation - Category 2; Eye irritation - Category 2A; 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**

Hazard pictogram:

Signal word: Danger

Hazard statements:

H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
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 Statements**

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands and skin thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves.

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| | 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. |
| 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 |
|---|---|---|---|
| Methylenediphenyl diisocyanate (mixed isomers) | 26447-40-5 | 30 | MDI |
| 2-(2-ETHOXYETHOXY)ETHYL ACETATE | 112-15-2 | 20 | De Acetate |
| Propylene carbonate | 108-32-7 | 2 | PC |
| Toluene-2,4-diisocyanate | 584-84-9 | 0.5 | 2,4-TDI |

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

## SECTION 4. FIRST AID MEASURES

**First Aid Measures**

General advice:

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

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| Target Organs | Respiratory system |
| Medical Conditions Aggravated by Exposure | Asthma, respiratory conditions. |

## SECTION 5. FIRE FIGHTING MEASURES

**Extinguishing Media**

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

**Specific Hazards Arising from the Product**

Hazardous product combustion: 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. Not sensitive to static discharge.

Special hazards:

**Special Protective Equipment and Precautions for Firefighters**

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

Special firefighting procedures: Knock down vapours or gases with water fog or fine water spray.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

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

Non-emergency and emergency personnel: 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: 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: 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** | **ACGIH TLV®** | | **OSHA PEL** | | **AIHA WEEL** | |
|---|---|---|---|---|---|---|
| Chemical Name | **TWA** | **STEL** | **TWA** | **Ceiling** | **8-hr TWA** | **TWA** |
| Methylenediphenyl diisocyanate (mixed isomers) | 0.005 ppm | | | 0.2 mg/m3 | | |
| Toluene-2,4-diisocyanate | 0.001 ppm | 0.005 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**

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| Eyes/face protection: | Wear chemical safety goggles and face shield when contact is possible. |
| Skin/hand/body protection: | Wear chemical protective clothing e.g., gloves, aprons, boots.<br>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 |
| Other protective equipment: | None known. |
| General hygiene considerations: | None known. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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| **Appearance:** | Light brown lustrous liquid. Absorbs moisture from the air. Particle Size: Not available |
| **Odor:** | Aromatic |
| **Odor threshold:** | Not available |
| **pH:** | 5.5 - 7.0 |
| **Melting/freezing point:** | Not available (melting); Not available (freezing) |
| **Initial boiling point and boiling range:** | Not available |
| **Flash point:** | Not applicable |
| **Flash point method:** | Not available |
| **Evaporation rate:** | Not available |
| **Flammability (solid, gas):** | Not available |
| **Upper/lower flammability or explosive limits:** | Not available |
| **Vapor pressure:** | Not available |
| **Vapor density (air=1):** | Not available |
| **Relative density (water=1):** | 1.145 at 68 ºF (20 ºC) |
| **Solubility:** | Not applicable in water; Moderately soluble in common organic solvents. |
| **Partition coefficient n-octanol/water:** | Not available |
| **Auto-ignition temperature:** | Not available |
| **Decomposition temperature:** | Not available |
| **Viscosity:** | Not available (kinematic); 650 - 800 centipoises (dynamic) |
| **Physical State** | Liquid |
| **Molecular Formula** | Not applicable |
| **Molecular Weight** | Not available |
| **Bulk Density** | Not available |
| **Surface Tension** | Not available |
| **Critical Temperature** | Not available |
| **Electrical Conductivity** | Not available |
| **Vapour Pressure (at 50°)** | Not available |

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| **Saturated Vapour Concentration** | Not available |

## SECTION 10. STABILITY AND REACTIVITY

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| 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**

Interactive effects: No information was located.

| Product Name | LC50 | LD50 (oral) | LD50 (dermal) |
|---|---|---|---|
| Methylenediphenyl diisocyanate (mixed isomers) | 2 mg/L (rat) (aerosol) | > 2,000 mg/kg (rat) | > 9,400 mg/kg (rabbit) |
| Toluene-2,4-diisocyanate | 0.1 mg/L (rat) (4-hour exposure) (vapour) | 6,170 mg/kg (rat) | > 16,000 mg/kg (rabbit) |
| 2-(2-ETHOXYETHOXY) ETHYL ACETATE | | 11,000 mg/kg (rat) | 15,000 mg/kg (rabbit) |

Inhalation ATEmix = 5 mg/L (4-hour exposure) (vapour)

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| Skin corrosion or irritation: | May cause mild irritation based on information for closely related chemicals. |
| Serious eye damage or irritation: | May cause serious eye irritation based on information for closely related materials. |
| 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. (Toluene-2,4-diisocyanate) |
| Germ cell mutation: | No information was located. |

**Carcinogenicity**

| Chemical Name | IARC | ACGIH® | NTP | OSHA |
|---|---|---|---|---|
| Methylenediphenyl diisocyanate (mixed isomers) | Group 3 | Not designated | Not Listed | Not Listed |
| Toluene-2,4-diisocyanate | Group 2B | A3 | Reasonably anticipated | Not Listed |
| 2-(2-ETHOXYETHOXY) ETHYL ACETATE | Not Listed | Not Listed | Not Listed | Not Listed |

May cause cancer.

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.

Aspiration hazard: No information was located.

**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.

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

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity Data**

| Chemical Name | LC50 Fish | EC50 Crustacea | ErC50 Aquatic Plants | ErC50 Algae |
|---|---|---|---|---|
| Methylenediphenyl diisocyanate (mixed isomers) | | > 1000 mg/L (Daphnia magna (water flea)) | | |
| 2-(2-ETHOXYETHOXY) ETHYL ACETATE | > 10000 mg/L (Pimephales promelas (fathead minnow); 96-hour) | | | |

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.

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

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

**Other Information** Not applicable

## SECTION 15. REGULATORY INFORMATION

**United States**
TSCA 8(B) inventory: All ingredients are listed on TSCA inventory or are exempted.

**Canada**

CEPA DSL: All ingredients are listed on the DSL/NDSL.

## SECTION 16. OTHER INFORMATION

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|---|---|---|---|
| NFPA Rating: | Health - 1 | Flammability - 1 | Instability - 0 |
| SDS Prepared By: | Avanti International | | |
| Date of Preparation: | April 5, 2018 | | |
| Date of Last Revision: | November 27, 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 |
| 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).