

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: January 10, 2018

Revision: September 24, 2021

1 Identification

- Product identifier
- · Trade name: AV MASTER
- · Other means of identification: AVantage™ Liquid Photopolymer

· Recommended use and restriction on use

- · Recommended use: For producing Flexographic Printing Plates
- · Restrictions on use: No relevant information available.

• Details of the supplier of the Safety Data Sheet

• Manufacturer/Supplier: Anderson & Vreeland, Inc. 15348 US Route 127 E-W, Bryan, OH 43506 USA Tel 1-866-282-7697

• Emergency telephone number: ChemTel Inc. (800)255-3924 (North America) +1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

· Label elements

· GHS label elements

- The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms:



· Signal word: Warning · Hazard statements: H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. · Precautionary statements: P261 Avoid breathing mist, vapors, or spray. P264 Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. P272 Wear protective gloves/protective clothing/eye protection. P280 P302+P352 If on skin: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.

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25-40%

5-15%



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| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |

· Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:

868-77-9 2-hydroxyethyl methacrylate

Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317

3290-92-4 propylidynetrimethyl trimethacrylate

· Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

· Description of first aid measures

• After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

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

· After eye contact:

- Protect unharmed eye.
- Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

- Most important symptoms and effects, both acute and delayed:
- Allergic reactions
- Dizziness
- Coughing

· Indication of any immediate medical attention and special treatment needed:

If swallowed, gastric irrigation with added, activated carbon.

Monitor circulation, possible shock treatment.

If necessary oxygen respiration treatment.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

5 Fire-fighting measures

- Extinguishing media
- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray.
- For safety reasons unsuitable extinguishing agents: None.

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 Special hazards arising from the substance or mixture In case of fire, the following can be released: Carbon monoxide (CO) In certain fire conditions, traces of other toxic gases cannot be excluded.
 Advice for firefighters
 Protective equipment: Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information: Cool endangered receptacles with water spray.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
 Ensure adequate ventilation.
 Wear protective equipment. Keep unprotected persons away.
 Keep away from ignition sources.
 Environmental precautions Avoid release to the environment.
 Methods and material for containment and cleaning up
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Send for recovery or disposal in suitable receptacles.

Clean the affected area carefully; suitable cleaners are:

Warm water and cleansing agent

Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

- · Handling
- **Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace.

Avoid breathing mist, vapors, or spray. Avoid splashes or spray in enclosed areas. Keep away from heat and direct sunlight.

· Information about protection against explosions and fires: No special measures required.

· Conditions for safe storage, including any incompatibilities

• Requirements to be met by storerooms and receptacles: Store in cool, dry conditions in well sealed receptacles.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions: Protect from heat and direct sunlight. Store receptacle in a well ventilated area.
- **Specific end use(s)** No relevant information available.



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| 8 Exposure controls/personal | | |
|---|--|--|
| · Control parameters | | |
| - | t require monitoring at the workplace: | |
| 3290-92-4 propylidynetrimethyl tri | - | |
| WEEL (USA) Long-term value: 1 m Skin | g/m³ | |
| · Exposure controls | | |
| General protective and hygienic n | | |
| Immediately remove all soiled and c | | |
| Wash hands before breaks and at the Avoid breathing mist, vapors, or spra | | |
| Avoid contact with the eyes and skir | | |
| · Engineering controls: No relevant | | |
| Breathing equipment: | | |
| Not necessary if room is well-ventila | | |
| • Protection of hands: | evice in case of insufficient ventilation. | |
| | | |
| Protective gloves | | |
| Flotective gloves | | |
| | | |
| Material of gloves Natural rubber, NR | | |
| Butyl rubber, BR | | |
| · Eye protection: | | |
| | | |
| Safety glasses | | |
| | | |
| · Body protection: Protective work c | lothing | |
| · Risk management measures N | | |
| | | |
| 9 Physical and chemical prop | erties | |
| · Information on basic physical | and chemical properties | |
| · Appearance: Form: | Viacous | |
| Form: Color: | Viscous Various colors | |
| · Odor: | Characteristic | |
| · Odor threshold: | Not determined. | |
| · pH-value at 20 °C (68 °F): | 7 | |
| · Melting point/Melting range: | , Not determined. | |
| · Boiling point/Boiling range: | > 200 °C (>392 °F) | |
| | Nataasiasha | |
| · Flash point: | Not applicable. | |



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| · Flammability (solid, gaseous): | Not applicable. | |
| · Decomposition temperature: | Not determined. | |
| · Danger of explosion: | Product does not present an explosion hazard. | |
| · Explosion limits | | |
| Lower: | Not determined. | |
| Upper: | Not determined. | |
| · Vapor pressure: | Not determined. | |
| · Density: | | |
| Relative density: | 1.05 | |
| Vapor density: | Not determined. | |
| Evaporation rate: | Not determined. | |
| · Solubility in / Miscibility with | | |
| Water: | Not miscible or difficult to mix. | |
| · Partition coefficient (n-octanol/wat | ter): Not determined. | |
| · Viscosity | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| Other information | No relevant information available. | |

10 Stability and reactivity

· Reactivity: No relevant information available.

· Chemical stability:

• Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Can decompose slowly with localized heating above 150°C.

- Possibility of hazardous reactions Reacts with reducing agents. Reacts with strong oxidizing agents. Reacts with acids. Reacts with amines. · Conditions to avoid Avoid acids.
- · Incompatible materials Oxidizers, strong bases, strong acids
- · Hazardous decomposition products Carbon monoxide and carbon dioxide

11 Toxicological information

· Information on toxicological effects

• Acute toxicity: Based on available data, the classification criteria are not met.

- · LD/LC50 values that are relevant for classification: None.
- · Primary irritant effect:

· On the skin: Irritant to skin and mucous membranes.

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- On the eye: Irritating effect.
- · Sensitization: Sensitizing effect through inhalation is possible with prolonged exposure.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

• NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- · Toxicity
- Aquatic toxicity Harmful to aquatic life with long lasting effects.
- **Persistence and degradability** No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- Mobility in soil: No relevant information available.
- · Additional ecological information
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· Uncleaned packagings

• **Recommendation:** Disposal must be made according to official regulations.

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• Recommended cleansing agent: Water, if necessary with cleansing agents.

| 4 Transport information | |
|--|-----------------|
| · UN-Number | |
| · DOT, ADR, IMDG, IATA | Not regulated. |
| · UN proper shipping name | |
| · DOT, ADR, IMDG, IATA | Not regulated. |
| · Transport hazard class(es) | |
| · DOT, ADR, IMDG, IATA | |
| · Class | Not regulated. |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | Not regulated. |
| · Environmental hazards | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of | |
| MARPOL73/78 and the IBC Code | Not applicable. |

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)

· SARA

· Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

• TSCA (Toxic Substances Control Act)

All ingredients are listed.

· Proposition 65 (California)

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

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None of the ingredients are listed.

 \cdot Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

• NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

All ingredients are listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision January 10, 2018 / - September 24, 2021

 Abbreviations and acronyms: ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistant, Bio-accumulable, Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety and Health OSHA: Occupational Safety & Health Administration Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A Skin Sens. 1: Skin sensitisation - Category 1 Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do) Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com