1. IDENTIFICATION

Product identifier
Mixture identification:

Recommended use of the chemical and restrictions on use
Recommended use: Primer
Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party
Company: Mannington Mills, Inc.
P.O.Box 30 - Route 45
75 Mannington Mills Road
Salem, New Jersey 08079 U.S.A.
General Information: (856) 935-3000

Emergency 24 hour numbers:
(USA) CHEMTREC 1-800-424-9300
(Canada) CANUTEC 1-613-996-6666

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

The product is not classified as hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

Label elements
The product is not classified as hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

Ingredient(s) with unknown acute toxicity:
None

Hazards not otherwise classified identified during the classification process:
None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
N.A.

Mixtures
Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Name</th>
<th>Ident. Numb.</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1-0.25 %</td>
<td>Ethylene glycol</td>
<td>CAS:107-21-1</td>
<td>Acute Tox. 4, H302; STOT RE 2, H373; Eye Irrit. 2B, H320; STOT SE 2, H371</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:
Wash with plenty of water and soap.

In case of eyes contact:
Wash immediately with water.

In case of Ingestion:
Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:
Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed
N.A.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES
Extinguishing media
Suitable extinguishing media:
- Water.
- Carbon dioxide (CO2).

Unsuitable extinguishing media:
None in particular.

Specific hazards arising from the chemical
- Do not inhale explosion and combustion gases.
- Burning produces heavy smoke.
- Hazardous combustion products: N.A.
- Explosive properties: N.A.
- Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters
- Use suitable breathing apparatus.
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
- Wear personal protection equipment.
- Remove persons to safety.
- See protective measures under point 7 and 8.

Methods and material for containment and cleaning up
- Suitable material for taking up: absorbing material, organic, sand
- Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling
- Avoid contact with skin and eyes, inhalation of vapours and mists.
- Do not eat or drink while working.
- See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities
Storage temperature: N.A.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>OEL Type</th>
<th>Country</th>
<th>Ceiling</th>
<th>Long Term</th>
<th>Long Term</th>
<th>Short Term</th>
<th>Short Term</th>
<th>Behaviour</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>ACGIH</td>
<td>C</td>
<td></td>
<td>52</td>
<td>20</td>
<td>104</td>
<td>40</td>
<td>Indicative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls: N.A.

Individual protection measures

Eye protection:
- Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:
- No special precaution must be adopted for normal use.

Protection for hands:
- Not needed for normal use.

Respiratory protection:
N.A.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid
Appearance and colour: white
Odour: N.A.
Odour threshold: N.A.

pH: 8.75

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: >100 °C (212 °F)

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.11 g/cm3

Solubility in water: Dispersible

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

**Other information**

- Substance groups relevant properties: N.A.
- Miscibility: N.A.
- Fat Solubility: N.A.
- Conductivity: N.A.

### 10. STABILITY AND REACTIVITY

**Reactivity**

Stable under normal conditions

**Chemical stability**

Data not available.

**Possibility of hazardous reactions**

None.

**Conditions to avoid**

Stable under normal conditions.

**Incompatible materials**

None in particular.

**Hazardous decomposition products**

None.

### 11. TOXICOLOGICAL INFORMATION

**Information on toxicological effects**

**Toxicological information of the mixture:**

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

**Toxicological information on main components of the mixture:**

- **Ethylene glycol**
  - a) acute toxicity
    - LD50 Oral Rat = 4000 mg/kg
    - LD50 Skin Rat = 10600 mg/kg

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
12. ECOLOGICAL INFORMATION

Toxicity
Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Component</th>
<th>Ident. Numb.</th>
<th>Ecotox Infos</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1-0.25 % Ethylene glycol</td>
<td>CAS: 107-21-1</td>
<td></td>
<td>a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss = 41000 mg/L 96h IUCLID</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss 14 mL/L 96h EPA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity: LC50 Fish Lepomis macrochirus = 27540 mg/L 96h EPA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity: LC50 Fish Pimephales promelas 40000 mg/L 96h EPA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity: LC50 Fish Poecilia reticulata = 16000 mg/L 96h IUCLID</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna = 46300 mg/L 48h IUCLID</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity: EC50 Algae Pseudokirchneriella subcapitata 6500 mg/L 96h IUCLID</td>
</tr>
</tbody>
</table>

Persistence and degradability
N.A.

Bioaccumulative potential
N.A.

Mobility in soil
N.A.

Other adverse effects
N.A.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

UN number
ADR-UN number: N.A.
DOT-UN Number: N.A.
IATA-Un number: N.A.
IMDG-Un number: N.A.

UN proper shipping name
ADR-Shipping Name: N.A.
DOT- Proper Shipping Name: N.A.
IATA-Technical name: N.A.
IMDG-Technical name: N.A.

Transport hazard class(es)
ADR-Class: N.A.
DOT-Hazard Class: N.A.
IATA-Class: N.A.
IMDG-Class: N.A.

Packing group
ADR-Packing Group: N.A.
DOT-Packing group: N.A.
IATA-Packing group: N.A.
IMDG-Packing group: N.A.

Environmental hazards
Marine pollutant: No
Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
N.A.

Special precautions
Department of Transportation (DOT):
N.A.
Road and Rail (ADR-RID):
N.A.
Air (IATA):
N.A.
Sea (IMDG):
N.A.

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act
TSCA inventory:
All the components are listed on the TSCA inventory

TSCA listed substances:
Ethylene glycol is listed in TSCA Section 8b Section 5

SARA - Superfund Amendments and Reauthorization Act
Section 302 - Extremely Hazardous Substances:
no substances listed
Section 304 - Hazardous substances:
Ethylene glycol
Section 313 - Toxic chemical list:
Ethylene glycol

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
Substance(s) listed under CERCLA:
Ethylene glycol Reportable quantity: 5000 pounds

CAA - Clean Air Act
CAA listed substances:
Ethylene glycol is listed in CAA Section 112(b) - HAP Section 112(b) - HON

CWA - Clean Water Act
CWA listed substances:
no substances listed

USA - State specific regulations

California Proposition 65
Substance(s) listed under California Proposition 65:
Ethylene glycol Listed as reproductive toxicant

Massachusetts Right to know
Substance(s) listed under Massachusetts Right to know:
Ethylene glycol

Pennsylvania Right to know
Substance(s) listed under Pennsylvania Right to know:
Ethylene glycol

New Jersey Right to know
Substance(s) listed under New Jersey Right to know:
Ethylene glycol

Canada - Federal regulations

DSL - Domestic Substances List
DSL Inventory:
All the substances are listed in the DSL.

NDSL - Non Domestic Substances List
NDSL Inventory:
no substances listed

NPRI - National Pollutant Release Inventory
Substances listed in NPRI:
no substances listed

16. OTHER INFORMATION

Safety Data Sheet dated: 7/6/2018 - version 1
Product code: ADH015

Additional classification information

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H320</td>
<td>Causes eye irritation.</td>
</tr>
<tr>
<td>H371</td>
<td>May cause damage to organs.</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
</tbody>
</table>

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer’s responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.