SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name
Vinamul 3479

REACH Registration Number
This product is a mixture and therefore not directly subject of the registration requirements under REACH.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Industrial use

1.3. Details of the supplier of the safety data sheet

Celanese Production Netherlands B.V.
De Asselen Kull 24
NL-6161 RD Geleen
Netherlands***

Celanese Sales Germany GmbH
Am Unisys-Park 1
65843 Sulzbach (Taunus)
Germany***

SDS Contact (email of responsible person)
HazCom@celanese.com

1.4. Emergency telephone number

CHEMTREC: +1 703 527 3887 (Collect calls accepted)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation 1272/2008/EC (CLP)
Not a hazardous substance or preparation according to Regulation 1272/2008 (CLP)***

2.2. Label elements

EC Hazards
EUH210 - Safety data sheet available on request

2.3 Other Hazards

The mixture does not meet the criteria for PBT / vPvB according to REACH, Annex XIII

Statements of hazard
Frequent contact can lead to skin and eye irritation, especially if product is allowed to dry out
Observe the usual precautions when handling chemicals.
SECTION 3: Composition/information on ingredients

Chemical characterization  Water-borne polymer emulsion. Basis: Ethylene N-Methylolacrylamide Vinyl acetate Vinylchloride***

3.1. Substances  not applicable

3.2. Mixtures  see Chemical characterization Details provided in the tables below

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No</th>
<th>EC-No.</th>
<th>Identification Number</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture of: 5-Chloro-2-methyl-4-isothiazolin-3-one [EC No. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC No. 220-239-6] (3:1)</td>
<td>55965-84-9</td>
<td>247-500-7 + 220-239-6</td>
<td>613-167-00-5</td>
<td>0.0014</td>
</tr>
<tr>
<td>9-Octadecenoic acid (Z)-, sulfonated, potassium salts</td>
<td>68609-93-8</td>
<td>271-843-1</td>
<td>none</td>
<td>&lt; 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>1272/2008/EC (CLP)</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture of: 5-Chloro-2-methyl-4-isothiazolin-3-one [EC No. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC No. 220-239-6] (3:1)</td>
<td>Acute oral toxicity - Category 3</td>
<td>H301</td>
</tr>
<tr>
<td></td>
<td>Acute inhalation toxicity - Category 2</td>
<td>H330</td>
</tr>
<tr>
<td></td>
<td>Acute dermal toxicity - Category 2</td>
<td>H310</td>
</tr>
<tr>
<td></td>
<td>Skin corrosion / irritation - Category 1B</td>
<td>H314</td>
</tr>
<tr>
<td></td>
<td>Serious eye damage / eye irritation - Category 1</td>
<td>H318</td>
</tr>
<tr>
<td></td>
<td>Acute aquatic toxicity - Category 1</td>
<td>H400</td>
</tr>
<tr>
<td></td>
<td>Chronic aquatic toxicity - Category 1</td>
<td>H410</td>
</tr>
<tr>
<td></td>
<td>Skin sensitization - Category 1A***</td>
<td>H317***</td>
</tr>
<tr>
<td>9-Octadecenoic acid (Z)-, sulfonated, potassium salts</td>
<td>Serious eye damage / eye irritation - Category 2***</td>
<td>H319***</td>
</tr>
</tbody>
</table>

Remarks  For the full text of the H-statements mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General Information  Remove contaminated, soaked clothing immediately and dispose of safely***

Inhalation  Move to fresh air. If symptoms persist, call a physician.

Skin  Wash off with soap and water. If symptoms persist, call a physician.

Eyes  Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Ingestion  If swallowed, seek medical advice immediately and show this container or label. If conscious, drink plenty of water. Do not induce vomiting without medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Notes to physician

Main symptoms  None known.
4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

**Suitable extinguishing media**
The product in solution form does not burn. The product will burn only after the water it contains is driven off. For dry polymer, use alcohol resistant foam, carbon dioxide (CO2) or dry chemical.***

**Extinguishing media which must not be used for safety reasons**
Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture
Under conditions giving incomplete combustion, hazardous gases produced may consist of
- Carbon monoxide
- Carbon dioxide (CO2)
Combustion gases of organic materials must in principle be graded as inhalation poisons

5.3. Advice for firefighters

**Special protective equipment for fire-fighters**
Wear self contained breathing apparatus for fire fighting if necessary.

**Environmental precautions**
Dike and collect water used to fight fire.***

**Other Information**
This is a water-based product and presents no particular fire or explosion hazard.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Contaminated surfaces will be extremely slippery. Avoid contact with the skin and the eyes.

6.2. Environmental precautions
Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Dike and collect water used to fight fire***

6.3. Methods and material for containment and cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Contaminated equipment (brushes, rags) must be cleaned immediately with water. Dispose of in accordance with local regulations***

6.4. Reference to other sections
Consider the information for "Personal Protection" in chapter 8 of this Safety Data Sheet

SECTION 7: Handling and storage

7.1. Precautions for safe handling

**Hygiene measures**
Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Take off all contaminated clothing immediately Wash contaminated clothing before re-use***
Advice on safe handling
Open containers in ventilated area. Product may contain hazardous volatile ingredients which could accumulate in the unvented headspace of drums or containers. Do not breathe vapor... During longer storage small amounts of carbon monoxide may form. To the best of our knowledge, no OEL (occupational exposure limit) is exceeded during the intended use. Containers/tanks may only be entered after thoroughly executed ventilation while considering national regulations and international standards for inspection of containers/tanks. In any case of doubt a measurement of the CO concentration is necessary***

Incompatible products
Materials that react with water

Protection - fire and explosion:
No special protective measures against fire required.

Reduce the release of the substance or mixture to the environment
See Section 8: Environmental exposure controls

7.2. Conditions for safe storage, including any incompatibilities

Material storage
Store locked up. Keep tightly closed in a dry and cool place. Protect from frost. To maintain product quality, do not store in heat or direct sunlight.. Keep at temperatures between 5°C and 35°C (40°F and 95°F). Agitate before use***

Incompatible products
Materials that react with water

Technical measures/Storage conditions
No special technical protective measures required***

German storage class
12: Non-combustible liquids

7.3. Specific end use(s)
None known

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

EC Exposure Limit Values
No exposure limits established.

DNELs
The product is exempt from REACH registration

PNECs
The product is exempt from REACH registration

8.2. Exposure controls

Engineering measures
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.
Personal protective equipment

**General advice**
Avoid contact with skin and eyes.

**Hygiene measures**
Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash contaminated clothing before re-use.

**Eye protection**
Safety glasses.

**Hand protection**
Chemicals resistant gloves

**Suitable material**
Nitrile rubber

**Type**
Nitril (Company KCL) or comparable article; or refer to glove manufacturer's recommendation

**Evaluation**
according to EN 374: level 6

**Material thickness**
Approx. 0.1 / 0.4 mm

**Break through time**
> 480 min

**Environmental exposure controls**
Do not discharge into the drains/surface waters/groundwater

**Environmental Precautions**
Should not be released into the environment

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 SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>white</td>
</tr>
<tr>
<td>Odor</td>
<td>sweet</td>
</tr>
<tr>
<td><strong>Autoignition Temperature</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>0</td>
</tr>
<tr>
<td>Boiling point/range</td>
<td>~ 100°C***</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>0.95 - 1.1 g/ml @ 25°C</td>
</tr>
<tr>
<td><strong>Method</strong></td>
<td>ISO 2811-3***</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>4.0 - 5.5</td>
</tr>
<tr>
<td><strong>Method</strong></td>
<td>ISO 976</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>50 - 300 mPa*s</td>
</tr>
<tr>
<td><strong>Method</strong></td>
<td>Brookfield Visc. RVT Sp. 2 / 20 r.p.m.</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>24 hPa @ 20°C***</td>
</tr>
<tr>
<td><strong>Water solubility</strong></td>
<td>miscible</td>
</tr>
</tbody>
</table>

**9.2. Other information**
The product was not tested for properties not listed on the SDS

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 SECTION 10: Stability and reactivity

**10.1. Reactivity**
Stable under recommended storage conditions.
10.2. Chemical Stability
This cross-linked polymer will release formaldehyde in application processes involving the use of greater than 100 °C (212 F).

10.3. Possibility of hazardous reactions
No hazards to be especially mentioned.

10.4. Conditions to avoid
Do not freeze.

10.5. Incompatible Materials
Materials that react with water

10.6. Hazardous decomposition products
No decomposition if stored and applied as directed

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological data are not available. Observe the usual hygienic measures for handling chemicals***

SECTION 12: Ecological information

Ecotoxicological data are not available. According to experience, the material has no harmful effect on the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

**Product information**
Disposal required in compliance with all waste management related state and local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and possibilities for disposal. Diluted solution may be introduced into a biological purification plant, with permission of the responsible authorities.

**Uncleaned empty packaging**
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Regulations concerning reuse or disposal of used packaging materials must be observed..

**European Waste Catalogue**
Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

SECTION 14: Transport information

**ADR/RID**
Not regulated

**ADN**
Not regulated
SECTION 14: Transport information

ICAO/IATA
Not restricted

IMDG
Not regulated

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

REGULATION (EU) No 528/2012
Contains: Biocidal product contains C(M)IT / MIT (3:1) ***

Water Hazard Class (WGK):
WGK Class 1
WGK Source Classification according to AwSV***

15.2 Chemical Safety Assessment
Chemical Safety Assessment (CSA) is not required

SECTION 16: Other information

For further information, see:
For more information, consult the Technical Data Sheet (www.celanese-emulsions.com).

Other Information:
• Traces of residual monomers can be found in the product:
• Vinyl acetate
• Vinyl chloride
• N-methylolacrylamide

Changes against the previous version are marked by ***

Sources of key data used to compile the datasheet
Information contained in this safety data sheet is based on Celanese owned data and public sources deemed valid or acceptable. The absence of data elements required by ANSI or 1907/2006/EC indicates that no data meeting these requirements is available.

Further information
This information is based on our present state of knowledge. It shall describe our products regarding safety requirements and shall not be construed as a guarantee or statement of condition and/or quality.
Abbreviation and Acronym:

ADR = Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

CAS = Chemical Abstracts Service (division of the American Chemical Society)

CLP = Classification, Labelling and Packaging

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial Chemical Substances

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IMO)

ICAO = International Civil Aviation Organization

IMDG = International Maritime Code for Dangerous Goods

LC50 = Lethal Concentration

LD50 = Lethal Dose

RID = Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

Annex: Exposure Scenario(s)

Development of Exposure Scenario is not required