Function
Organic molecular defoamer based on Gemini surfactant technology.

Content of Hazardous components
SURFYNOL® MD 20 contains following dangerous ingredients according to Regulation (EC) No. 1272/2008 [CLP]:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration %</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxirane, 2-[[2-ethylhexyl]oxy[methyl]-, reaction products with</td>
<td>857892–58–1</td>
<td>approx. 98</td>
<td>Aquatic Chronic, 2, H411</td>
</tr>
<tr>
<td>polyethylene glycol ether with 2,4,7,9-tetramethyl-5-decyne-4,7-diol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conf.</td>
<td>Conf.</td>
<td>approx. 2</td>
<td>H318, 1 Eye dam.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H412, 3 Aquatic Chronic</td>
</tr>
</tbody>
</table>

Please note that these components are surfactants. For the specified concentration limits of the surfactants please refer to the Appendix 4 (a) of 5(a)(i) Derogations applying to substance groups of Ecolabel (2014/312/EU).

Absence of substances
We do not expect the presence of following substances within SURFYNOL® MD 20:

- Isothiazolinone compounds:
  - 2-methyl-2H-isothiazol-3-one (MIT)
  - 1,2-benzisothiazol-2(2H)-one (BIT)
  - 2-octyl-2H-isothiazol-3-one (OIT)
  - 5-chloro-2-methyl-isothiazolin-3-one / 2-methyl-4-isothiazolin-3-one (CMI/MIT mix)

- 3-iodo-2-propynyl butylcarbamate (IPBC)
• Zinc pyrithione
• N-(3-aminopropyl)-N-dodécylo propane-1, 3-diamine
• Zinc oxide
• Alkylphenolethoxylates (APEOs) and their derivatives
• Long chain perfluorinated surfactants:
  - Perfluorocarboxylic acids
  - Perfluoroalkyl sulfonates
• Metals and their compounds:
  - Cadmium, lead, chromium VI, mercury, arsenic, barium, selenium, antimony and cobalt
• Crystalline silica and leucophyllite minerals containing crystalline silica
• Phthalates:
  - DEHP (Bis-(2-ethylhexyl)-phthalate)
  - BBP (Butylbenzylphthalate)
  - DBP (Dibutylphthalate)
  - DMEP (Bis2-methoxyethyl phthalate)
  - DIBP (Diisobutylphthalate)
  - DIHP (Di-C6-8-branched alklyphthalates)
  - DHNUP (Di-C7-11-branched alklyphthalates)
  - DHP (Di-n-hexylphthalate)
• Formaldehyde
• Volatile Aromatic Hydrocarbons
• Halogenated solvents
• Nanomaterials

**VOC (volatile organic compounds) – content**
Determination via DIN EN ISO 11890/2: approx. 7 g/l

**SVOC (semi volatile organic compounds) – content**
Determination via DIN EN ISO 11890/2: approx. 31 g/l

**REACH / SVHC**
Please refer to our additional statements.
The information given above is based on and represents our current compositional knowledge (based on the knowledge of the production process, supplier information for raw materials and analytical data where applicable).

Please note that Evonik Resource Efficiency GmbH does not analyse whether the mentioned substances are contained, because the content of such substances is not part of our product specification or formulation.

We use raw materials of technical purity, therefore negligible amounts on the level of natural / technical impurities cannot be excluded.

In case of provided values these are considered to be typical concentrations and are not part of the product specification.

All provided information is based on our present knowledge and experience and is true and complete to the best of our knowledge and belief. However, no warranty, whether expressed or implied, or guarantee of product properties in the legal sense is intended or implied.

In case of any questions concerning the provided information or if you need additional advice you are welcome to contact us:

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