

Disponil® A types

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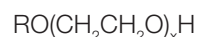
Disponil® A 1080
Disponil® A 1580
Disponil® A 3065
Disponil® A 4065

Nonionic emulsifiers for the chemical industry and emulsion polymerization

Chemical nature

The Disponil® A types are modified ethoxylates of native fatty alcohols.

The general formular of the fatty alcohol ethoxylates is described as follows:



R (A 1080/A 1580/A 3065) = C₁₂-C₁₄

R (A 4065) = C₁₆-C₁₈

x = 10, 15, 30, 40

PRD-Nos.*

30529357 Disponil® A 1080

30529449 Disponil® A 1580

30529347 Disponil® A 3065

30529434 Disponil® A 4065

* BASF's commercial product numbers.

Properties

The Disponil® A types are colorless to slightly yellow liquids.

Disponil®	Unit	A 1080	A 1580	A 3065	A 4065
Degree of ethoxylation	n EO	~ 10	~ 15	~ 30	~ 40
Physical form (23 °C)		liquid	liquid	liquid	liquid
Aktive matter (100 - water)	%	~ 80	~ 80	~ 65	~ 65
Water (EN 13267)	%	~ 20	~ 20	~ 35	~ 35
pH value (EN 1262, 10%, KCl 0.03%)		~ 7	~ 7	~ 7	~ 7
Pourpoint (DIN ISO 3016)	°C	< 10	< 15	< 10	< 15
Cloudpoint (EN 1890, Verfahren C)	°C	~ 65	~ 73	~ 77	~ 76
Density (DIN 51757, 23 °C)	g/cm ³	~ 1.03	~ 1.04	~ 1.07	~ 1.07
Surface tension, static (1% active substance, 25 °C, EN 14370)	mN/m	~ 33	~ 36	~ 37	~ 38
Critical micelle concentration (25 °C, EN 14370)	g/l*	< 0.1	< 0.1	~ 0.2	~ 0.3

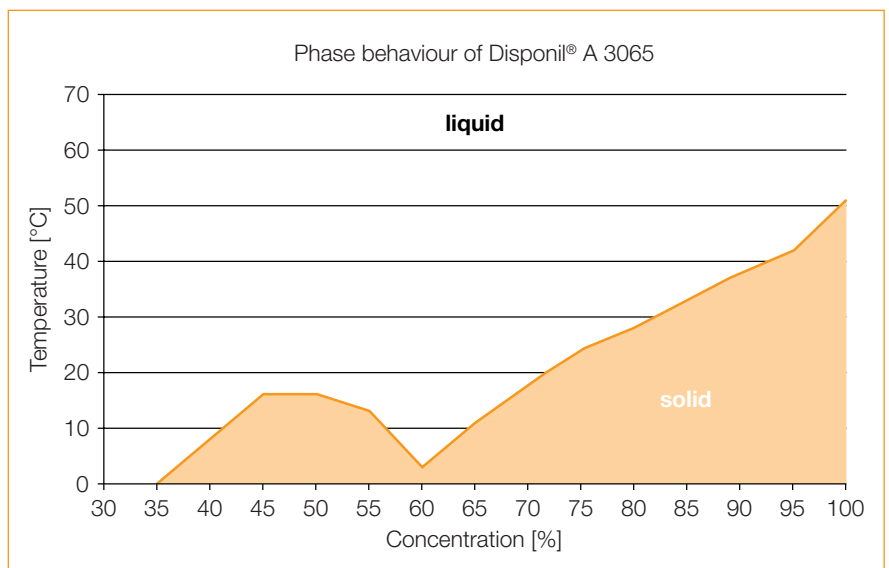
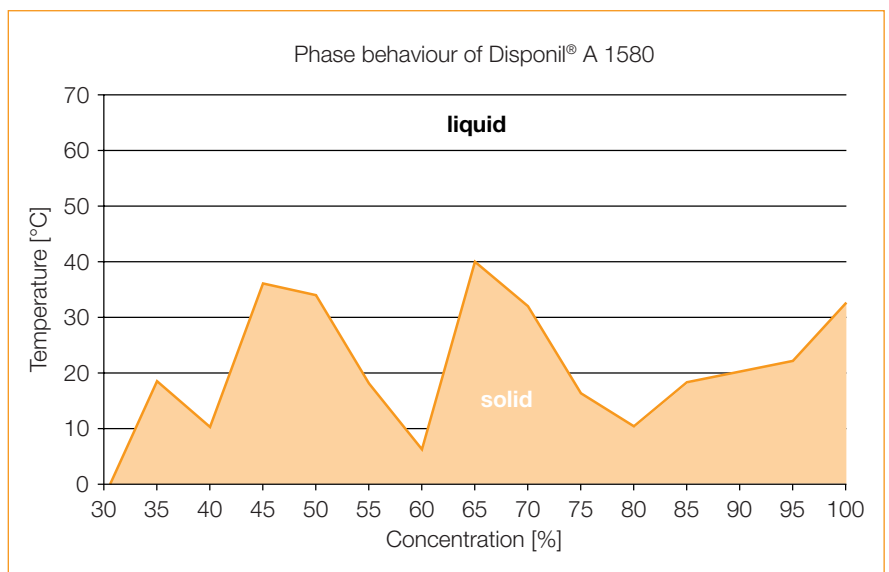
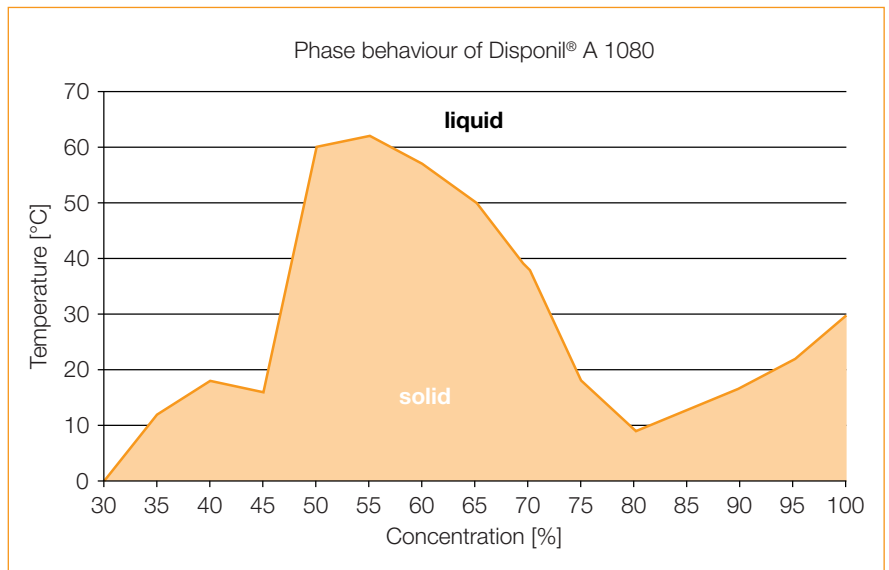
* aktive substance

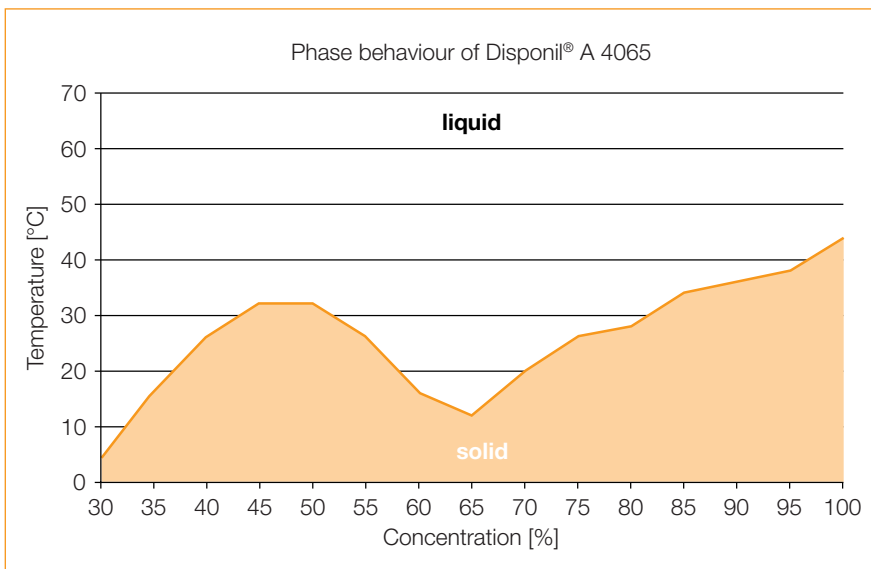
The information above is valid on the date of printing. Not all of these are part of the certificate of analysis.

The specified criteria are mentioned in the product specification which is available via your local BASF representative.

Solubility

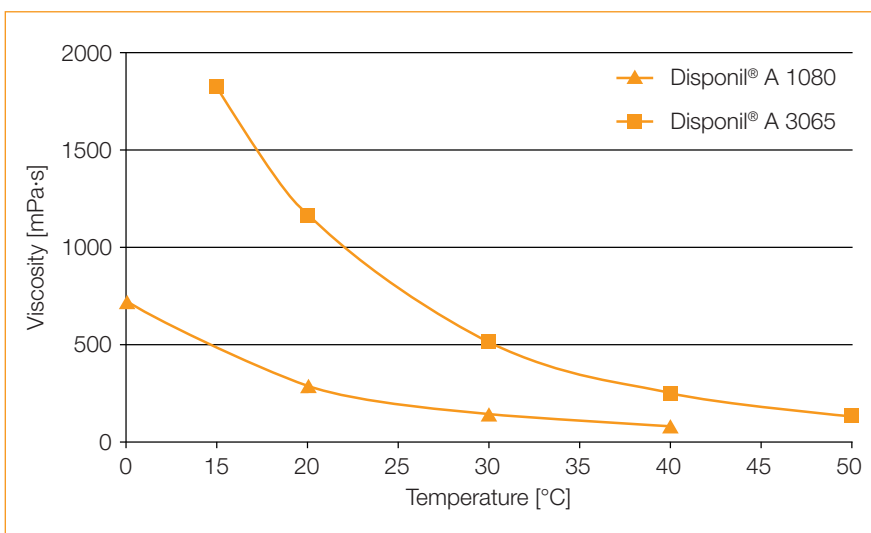
As most linear fatty alcohol ethoxylates, the Disponil® A types exhibit a phase behaviour when diluted with water. The following diagram shows the pourpoint of dilutions with different active matter concentrations. When diluting the products it should be ensured to stay at temperatures well above the pourpoint in order to avoid gel phases. In addition it is recommended to add the products to the water phase.





Viscosity

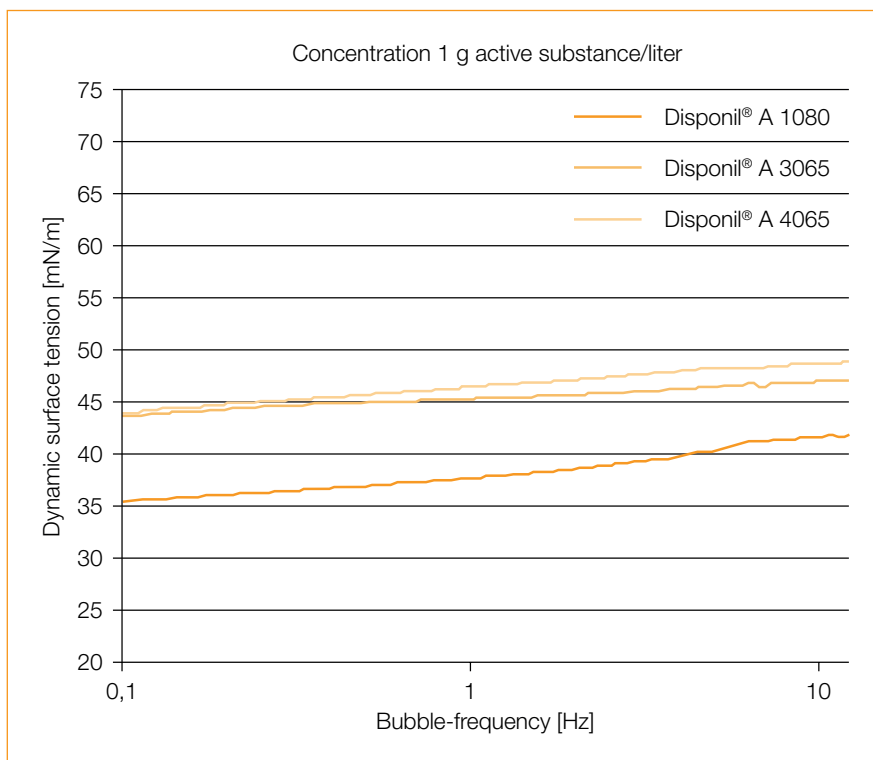
The relationship of the viscosity as a function of temperature is always an important point to consider, as far as storage, shipping and dosage is concerned. The following diagram shows this relationship for some selected products of the Disponil® A-range:



Viscosity as a function of temperature.

Dynamics

Dynamic surface tension is an indicative measure of the speed with which a surfactant can orientate at new interfaces. This is particularly important, for example, during the dosing processes.



Storage

It is recommended to store the Disponil® A types at temperatures above their pourpoints and at a maximum of 50 °C.

If the products are exposed to temperatures below their pourpoint they may form gels or become crystalline. The products are not damaged by low temperatures, but they will become unpumpable and heterogeneous.

The homogeneous state is to be recovered by gentle heating and stirring at maximum 50 °C.

Materials

The following materials may be used for the storage of the Disponil® A types:

- V4A-steel (1.4571)
- HDPE

Shelf life

The Disponil® A types have a shelf life of at least 24 months, provided they are stored properly and drums are kept tightly sealed.

The pH value might drop throughout the storage time, which is a common phenomena of ethoxylated fatty alcohols. This usually does not have a negative effect on the product quality. If required the pH value may be increased by adding sodium hydroxyde solution.

Safety

We know of no ill effects that could have resulted from using the Disponil® A types for the purpose for which they are intended and from processing them in accordance with current practice.

According to the experience we have gained over many years and other information at our disposal, the Disponil® A types do not exert any harmful effects on health, provided that they are used properly, due attention is given to the precautions necessary for handling chemicals, and the information and advice given in our safety data sheets are observed.

Labelling

Please refer to the latest safety data sheets for detailed, up-to-date information on classification, labelling and product safety.

Note

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March 2014