Product Information

TAGAT® V 20

PRODUCT DESCRIPTION

TAGAT® V 20 is a non-ionic emulsifier based on a POE-20 glycerol oleoricinoleate.

Typical Properties

Property	Unit	Value
Acid Value	mg KOH/g	5-7
Appearance		clear liquid
Color Hess-Ives		max. 30
Hydrophilic-lipophilic Balance (HLB) Value		8.4
Hydroxyl Value	mg KOH/g	43-53
Saponification Value	mg KOH/g	100-120

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

The low foaming emulsifier TAGAT® V 20 is used in a wide range of applications such as:

- Metal working fluids (MWF)
- Concrete release agents
- Textile auxiliary formulations
- Pulp and paper defoamers

In case of metalworking application, TAGAT® V 20 is mainly used as primary emulsifier for the formulation of environmentally friendly lubricants based on vegetable (e. g. rape seed oil, sun flower oil, canola oil) and synthetic ester oils (e. g. trimethylol propane trioleate) as well as for combinations of these oils with mineral oils.

If combined with alcohol ethoxylates or fatty acid alkanol amides, TAGAT® V 20 can be used as co-emulsifier for the formulation of purely mineral oil based metal working fluids.

Product Composition

Product Composition	Unit	Value
Active Content	%	100
Water Content, max.	%	1

The data represents typical values (no product specification)

BENEFITS & ADVANTAGES

TAGAT® V 20

- Is based on raw materials derived from natural origin, which leads correspondingly to excellent dermatological (no skin irritation) as well as to good toxicological and ecological properties (no hazard warning labels, water hazard class 1)
- Has excellent emulsifying and stabalizing properties, which ensures the spontaneous formation of finely dispersed and long-time stable oil-in-water emulsions
- Enables in purely mineral oil based lubricants in combination with alcohol ethoxylates synergistic effects that often allows a decrease in total emulsifier amount as a result of improved emulsion stability
- Shows a good solubility in vegetable and synthetic ester oils
- Impoves the solubility of biocides in mineral oil based lubricants
- Enhances lubricating properties of water-mixed fluids
- Shows a low foaming tendency and thus leads to low foaming formulations
- Has in alkaline water-mixed lubricants (pH 9.5) a significantly improved hydrolysis resistance compared to conventional POE-20 castor oils
- Provides an excellent thermal stability

HANDLING & PROCESSING

Depending on other components (such as fatty acid amides, fatty acid amine soaps, alcohol ethoxylates), which can be present in the lubricant formulation as well as the

kind of base oils and the overall oil content, the required dosage of TAGAT® V 20 may vary.

If TAGAT® V 20 is used as sole emulsifier, 10 to 15 % of TAGAT® V 20 are usually sufficient to obtain stable emulsions.
Control of an adequate HLB value adapted to the overall formulation is recommendable and may require an additional co-emulsifier (such as TEGIN® O V).

If TAGAT® V 20 is used in pure mineral oil based lubricant formulations as co-emulsifier in combination with other emulsifiers (e.g. alcohol ethoxylates), a dosage of 3 - 5 % of TAGAT® V 20 is recommended.

PACKAGING

4 x 200 kg drums corr. 800 kg (full pallet)
1 000 kg container

SHELF LIFE

TAGAT® V 20 can be stored in originally sealed containers at temperatures below 40 °C for at least 1 year.

HAZARDOUS SUBSTANCE

Information concerning

- Classification and labelling according to regulations for transport and for dangerous substances
- Protective measures for storage and handling
- Measures in case of accidents and fire
- Toxicity and ecological effects

is given in our material safety data sheets.

REGISTRATION LISTING SUMMARY

The relevant components of TAGAT® V 20 are listed/registered or exempt in the following chemical inventories.

Registration Listings	
Registry	**Status**
Australia (AICIS)	Yes
Canada (DSL)	Yes
China (IECSC)	Yes
European Union (EINECS/ELINCS)	Yes
Japan (ENCS)	Yes
Korea (KECL)	Yes
New Zealand (NZIoC)	Yes
Philippines (PICCS)	Yes
United States of America (TSCA) polymer exemption	Yes

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