Product Information

TEGOMER® DA 640

PRODUCT DESCRIPTION

TEGOMER® DA 640 is a liquid dispersing additive used for surface wetting to improve the dispersion properties of

- Inorganic fillers e.g. talc, barium sulfate
- Inorganic pigments e.g. titanium dioxide, ultramarine blue, iron oxides
- Organic pigments and carbon blacks with higher addition levels

TEGOMER® DA 640 is suitable at lower addition levels to be used as flocculent for inorganic particles only, e.g. titanium dioxide, metal hydroxides.TEGOMER® DA 640 is a primary or secondary emulsifier for the polymerization of acrylates or PVAc.

Typical Properties

Property	Unit	Value
Appearance		Liquid, slightly yellowish colored
pH Value		8.0-9.0
Viscosity at 25 °C	mPa·s	100-500

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

TEGOMER® DA 640 is an anionic modified polyether to be used for the following main applications

- Dispersing of fillers, inorganic and organic pigments in water-based systems
- Flocculation of inorganic pigments or fillers even in the presence of a high electrolyte content
- Emulsifier for polymerization

TEGOMER® DA 640 is applied as an emulsifier for the polymerization of acrylates or PVAc.

Pos	Substance	Weight (g)
1	Water	202.00
2	Polyvinyl alcohol. Gohsenol GH-17R	7.70
3	**TEGOMER® DA 640 (30 % active)**	12.82
4	Ammoniumperoxodisulfate	0.80
5	Water	8.00
6	Natriumacetate Trihydrat	1.40
7	Vinylacetate	150.00
8	Ammoniumperoxodisulfate	0.39

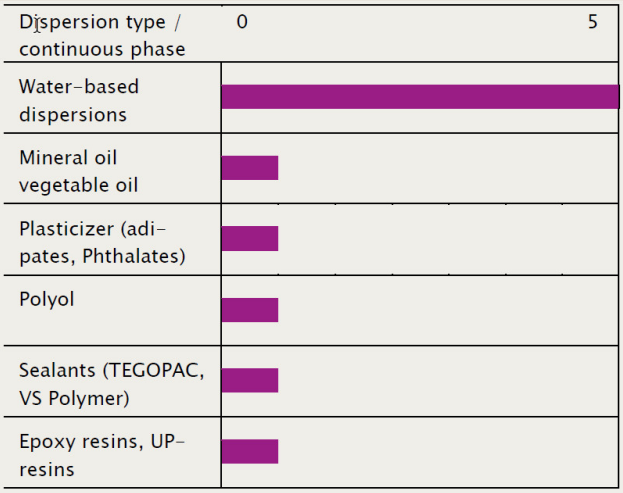
Product Composition

Product Composition	Unit	Value
Active Content	wt%	29-31

The data represents typical values (no product specification)

BENEFITS & ADVANTAGES

- Higher filling of pastes at low addition levels in combination with excellent rheological properties and no occurrence of gelling
- Higher Color strength and improved hiding power for titanium dioxide pastes
- Improved water repellence which goes parallel with the flocculation ability of high density materials
- Improved durability due to the hydrophobic character when used for surface treatment
- Less abrasion of doctor blades using filler or titanium dioxide pastes for the application of paper coatings
- Water-based formulations which contain significant amounts of glycol or other solvents can be stabilized as well
- Solvent- and nonylphenol ethoxylate-free emulsifier technology
- Pure acrylates as well as those with high EHA content for adhesive formulation reach fine particle size distribution if it is used as emulsifier
- Water pick up of emulsions and pigments / fillers is lowered



0 = no effect, 5 = highly recommended

DOSAGE

The required dosage level depends on the nature of the particle. To flocculate inorganic particles a dosage between 0.5% and 2.5% additive on filler/pigment is required. The dosage should be pre-evaluated with settlement trials and further depends on the exchange capacity and time available for the settlement.

TEGOMER® DA 640 can be used as secondary and primary emulsifier with typically 0.5-2.5% calculated on solid content of the polymerized emulsion.

TEGOMER® DA 640 can be easily combined with its non-ionic version.

TEGOMER® DA 646 especially for polymerization but also for pigment pastes.

	% AOP* (100 % dispersant)	% AOP TEGOMER® DA 640
Filler	0.2 – 2.0 %	0.7 – 7.0 %
Inorganic Pigment	1.0 – 5.0 %	3.5 – 16.5 %
Organic Pigment	10 – 30 %	35 – 100 %
Carbon black	10 – 50 %	35 – 165 %
Nano particles	5 – 15 %	17 – 50 %

*AOP = additive on pigment/filler

HANDLING & PROCESSING

TEGOMER® DA 640 should be added to the water-based resin or to the water before adding the pigment/filler. Pre-dilution is not necessary but possible in any ratio with water.

In case of a foam build up during grinding or pumping, add TEGO® Antifoam 1488 with 0.1% (dosage recommendation for a first trail). Alternative defoaming agents are TEGO® Antifoam 2291 and TEGO® Antifoam D 2315.

PACKAGING

200 kg plastic drums (800 kg each pallet)

1 000 kg containers

SHELF LIFE

TEGOMER® DA 640 can be stored for a minimum of 12 months in original sealed containers at room temperature. Do not store below 10°C because of the water-based nature. Stir before use.

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

Based on the submitted information of our raw material suppliers we can confirm, that TEGOMER® DA 640 is compliant with EC Regulation 1907/2006 (REACh).

The relevant components of TEGOMER® DA 640 are listed/registered or exempt in the following chemical inventories:

Registration Listings	
Registry	**Status**
Australia (AIIC)	Yes
Canada (DSL)	Yes
EU (EINECS/ELINCS)	Yes
South Korea (TCCL)	Yes
New Zealand (NZIoC)	Yes
Philippines (PICCS)	Yes
Taiwan (TCSI)	Yes
USA (TSCA)	Yes

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