Product Information

TEGOMER® DA 850

PRODUCT DESCRIPTION

TEGOMER® DA 850 is a polymeric copolymer with pigment affinic groups to be used as a dispersant in water-based surroundings. TEGOMER® DA 850 allows to transfer water-based pigment slurries into thermoplastics when water is being evaporated during the extrusion process.

Typical Properties

Property	Unit	Value
Appearance 25°C		Liquid, clear, slightly yellowish colored
Color Gardner		< 5.0
pH Value		6.0-7.5
Refractive Index		1.390
Viscosity at 25°C	mPa·s	100-500

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

TEGOMER® DA 850 is a liquid dispersing additive used in the manufacture of water-based pastes of:

- Inorganic fillers e.g. talc or barium sulfate, chalk
- Inorganic pigments e.g. titanium dioxide, ultramarine blue, iron oxides
- Organic pigments and carbon blacks

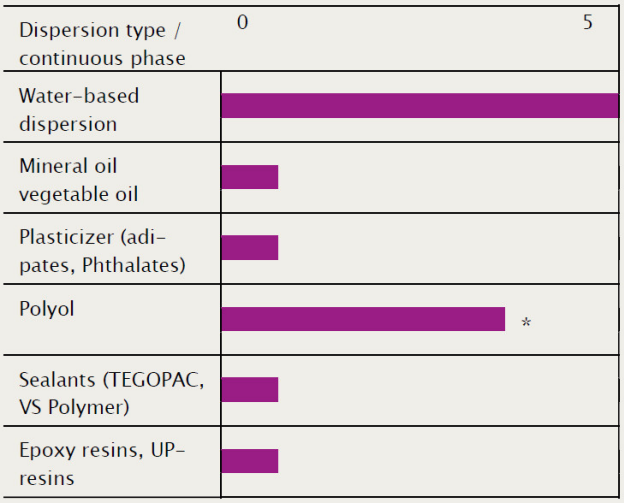
Product Composition

Product Composition	Unit	Value
Active Content	%	38-42

The data represents typical values (no product specification)

BENEFITS & ADVANTAGES

- Higher filling of pastes
- Excellent rheological properties even during long-term storage of pastes
- Prevention of hard settlement of fillers and pigments with high density, e.g. titanium dioxide or barium sulfate
- Improved color strength and covering power
- Less speck formation and agglomerates
- Reduced abrasion properties on the doctor blade used for the application of finishes
- Improved mechanical properties
- Improved durability
- Solvent- and nonylphenol ethoxylate-free



0 = no effect; 5 = highly recommended

* TEGOMER® DA 850 is only suitable for hydrophilic polyols with certain amounts of water in the final application.

DOSAGE

The required dosage level depends on the nature of the particles and on the composition of the polymeric formulation.

	% AOP* (100 % dispersant)	% AOP TEGOMER® DA 850
Filler	0.2 – 2.0 %	0.5 – 5.0 %
Inorganic Pigment	1.0 – 5.0 %	2.5 – 12.5 %
Organic Pigment	10 – 30 %	25 – 75 %
Carbon black	10 – 50 %	25 – 125 %
Nano particles	5 – 15 %	12.5 – 37.5 %

*AOP = additive on pigment/filler

HANDLING & PROCESSING

TEGOMER® DA 850 can be applied directly to the water-based system usually before adding the filler or pigment. This enables a high efficient grinding process.

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 2-80 and TEGO® Antifoam D 2315. The addition of small amounts of fumed silica (for instance 0.1-0.2% Aerosil 200) might modify rheology and prevent the settlement of inorganic pigments. These low amounts do not affect the final gloss of the surface.

PACKAGING

200 kg steel drums (800 kg each pallet)

1 000 kg containers

SHELF LIFE

TEGOMER® DA 850 can be stored for a minimum of 12 months in original sealed containers at room temperature.

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 850 is compliant with EC Regulation 1907/2006 (REACh).

The relevant components of TEGOMER® DA 850 are listed/registered or exempt in the following chemical inventories:

Registration Listings	
Registry	**Status**
Australia (AICIS)	Yes
Canada (DSL)	Yes
EU (REACH)	Yes
EU (EINECS/ELINCS)	Yes
Korea (KECL)	Yes
Philippines (PICCS)	Yes
Taiwan (TCSI)	Yes
USA (TSCA)	Yes

FOOD CONTACT COMPLIANCE

FDA

Based on the „no-migration principle" TEGOMER® DA 850 can be used in compliance with FDA's rules for food contact if used as an additive up to a maximum use level of 90 mg/m^2 food contact area. The field of application includes all types of plastics, paper, coatings or adhesives. The use should be consistent with Title 21 C.F.R (Code of federal regulation), included in e.g. §175.105, §175.125, §175.300, §176.170, §176.180 or §178.3725.

Disclaimer

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third-party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Evonik Operations GmbH

Interface & Performance
Goldschmidtstraße 100
45127 Essen, Germany
Phone Europe +49 201 173-2665
Phone Asia +86 21 61191 125
Phone Americas +1 804 727 0700
interface-performance@evonik.com
evonik.click/interface-performance

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