

## Technical Information

## TEGOMER® P 121

TEGOMER® P 121 is a dispersing additive based on amphiphilic copolymers especially designed for the preparation of colour concentrates and technical compounds delivered in powder form.

## Physical properties

Drop point (GM 1999 01)	approx. 115 °C
Melt viscosity (150 °C)	< 1 000 mPas
Appearance	free flowing powder

## Application

TEGOMER® P 121 can be applied for single pigment dispersion and tailor made colour concentrates for demanding dispersing processes. Furthermore, TEGOMER® P 121 is used for the dispersion of expensive additives, so called additive or combinational masterbatches.

TEGOMER® P 121 is used for masterbatches based on:

- polyolefins (especially polypropylene)
- technical polymers (due to its high temperature resistance)

Additionally, TEGOMER® P 121 is used in filled compounds.

## Benefits

TEGOMER® P 121 offers several advantages:

- increase of colour strength
- higher productivity and lower costs for coloration by reducing the amount of pigment
- higher filling grades of pigments
- less fibre fractures
- less agglomerates and aggregates
- excellent dilution behaviour
- suppression of re-agglomeration in downstream processes
- easy handling
- positive influence on masterbatch rheology
- excellent thermal and colour stability

## Dosage

TEGOMER® P 121 can be applied during a pre-mix of the overall formulation or directly i.e. through split-feed processing. The required dosage level depends on nature and amount of pigment in the masterbatch formulation.

	% AOP* (100 % dispersant)
Filler	2.0 – 4.0 %
Inorganic Pigment	2.0 – 4.0 %
Organic Pigment	30 – 50 %
Carbon black	40 – 100 %

\*AOP = additive on pigment/filler

Guiding formulations can be given by request.

TEGOMER® P 121 can be used in a cold or hot mixing process but in general, cold mixing is preferred since hot mixing has the risk of agglomerates formation, which are then wetted by TEGOMER® P 121 only from the outside.

## Food contact status

## Chinese guideline GB 9685–2016

TEGOMER® P 121 may be used in compliance with the Chinese guideline GB 9685–2016 in plastics based on PE, PP, PS, AS, ABS and PC up to a level of 2.5 % and in PET up to a level of 0.5 %.

## EC 10/2011

The ingredients of TEGOMER® P 121 are listed in the European Regulation 10/2011/EU. TEGOMER® P 121 can be used up to 4.5 % in the finished article.

## BfR Recommendations

TEGOMER® P 121 is a preparation, the ingredients of which comply with the Recommendation IX of the BfR (former BgVV). It can be used in all types of plastics.

## Swiss Ordinance 817.023.21

TEGOMER® P 121 complies with Swiss Ordinance Annex X as List A without restrictions.

## FDA

TEGOMER® P 121 may be used as a dispersing aid in polymers with up to 1 % in contact with aqueous food containing up to 8 % alcohol under conditions of use B ("Boiling water sterilized") through H ("Frozen or refrigerated storage: Ready-prepared foods intended to be reheated in container at time of use"), as described in Title 21 CFR Sec.176.170 c.) Table 1.

TEGOMER® P 121 may be used as a dispersing aid in polyolefins (complying with Title 21 CFR sec. 177.1520) with up to 0.166 % in contact with all types of food, except foods containing greater than 13 % alcohol under conditions of use B ("Boiling water sterilized") through H ("Frozen or refrigerated storage: Ready-prepared foods intended to be reheated in container at time of use"), as described in Title 21 CFR Sec.176.170 c.) Table 1.

## Registration

The components of TEGOMER® P 121 are listed in the following chemical inventories:

EINECS, TSCA, NDSL, ENCS, TCCL, PICCS, IECSC, NZIOC, TCSI

Based on the submitted information of our raw material suppliers we can confirm, that TEGOMER® P 121 is compliant with EC Regulation 1907/2006 (REACH).

## Storage stability

TEGOMER® P 121 is stable for a minimum of 1 year.

## Packaging

20 kg cardboard box with in-liner  
480 kg on pallets (24 x 20 kg)

## Hazardous goods classification

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.

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

**Evonik Nutrition & Care GmbH**  
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](mailto:interface-performance@evonik.com)  
[www.evonik.com/Interface-performance](http://www.evonik.com/Interface-performance)

