

## Technical Information

## ZETASPERSE® 3100

## Product description

ZETASPERSE® 3100 dispersant is a high-performance, polymeric surface-active agent designed for the optimal stabilization of a wide range of particle and pigment chemistries in aqueous systems. Based on a graft copolymer, ZETASPERSE® 3100 dispersant can provide robust electrosteric stabilization through ammonium-neutralized carboxylic acid anions and polyether combs, with aliphatic, aromatic, and ester moieties, offering diverse affinity for a variety of particle and pigment chemistries. A moderate polymeric molecular weight (10–25 kg/mol) offers flexibility for use with micro- and nano-scale particles.

## Physical properties

Appearance	Clear, amber liquid
Active matter	40 %
Viscosity (25 °C)	Approx. 500 mPas
Density (21 °C)	1.07 g/cm <sup>3</sup>
Flash Point (°C)	>100
Pour Point (°C)	0

## Application

ZETASPERSE® 3100 dispersant is a liquid dispersing additive used for the surface treatment of pigments to improve dispersion properties of:

- organic pigments
- inorganic fillers e. g. talc
- inorganic pigments e. g. titanium dioxide, ultramarine blue, iron oxides

ZETASPERSE® 3100 dispersant can be used for the aqueous dispersion of all pigments and particles. It has been found to offer superior performance with carbon black pigments, metal oxide pigments, and inorganic fillers and functional chemistry.

Suitable for use as the sole or secondary stabilization chemistries, ZETASPERSE® 3100 dispersant functions well in conjunction with wetting agent and grind aid additives.

## Properties/Benefits

- 40% active solution in water
- very good long-term stabilization of inorganic pigments and carbon blacks
- broad compatibility with various binders

## Dosage and handling

ZETASPERSE® 3100 dispersant can be applied directly to adhesive formulations usually before adding the filler or pigment.

The required dosage level depends on the nature of the particles and on the composition of the polymeric formulation. For use in adhesive formulations we recommend an initial dosage between 0.1 to 3.0 % of total formulation weight. Optimum dosage should be evaluated in suitable tests prior to the final application.

## Registration status

EINECS/ELINCS, TSCA, DSL, AICS, TCSI, ENCS, PICCS

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## Storage stability

The shelf life for ZETASPERSE® 3100 is 36 months from the date of manufacture (stored in original sealed containers at room temperature).

Keep containers tightly closed in a dry, cool, and well-ventilated place. Mix thoroughly before use.

Product is freeze-thaw stable; if frozen, warm to 20–40°C and mix before use.

## Packaging

19 kg steel drum

215 kg steel drum

## 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.

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