CLAYTONE-VZ V XR

Vegan, powdered rheology additive based on organically modified natural bentonite (organophilic phyllosilicate) for use in personal care applications to increase viscosity, provide thixotropic flow behavior and control syneresis in medium to high polar solvents.

Gamma irradiation sterilized version of CLAYTONE-VZ V.

Product data

Composition
Organophilic phyllosilicate (INCI: Stearalkonium Bentonite)

Vegan

Typical properties
The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Bulk density:	250–400 kg/m³
Water content:	max. 3 %
Particle size distribution D50:	12 µm
Sieve passing (200 mesh/74 µm):	min. 70 %
Total viable count:	< 100 cfu/g
Color:	light cream
Delivery form:	powder

Storage and transportation
CLAYTONE-VZ V XR should be transported and stored dry in unopened, original packaging at temperatures between 0 °C and 30 °C.

Applications

Personal care

Special features and benefits
CLAYTONE-VZ V XR is used in cosmetic products to increase viscosity, provide thixotropic flow behavior and control syneresis. It may be used to stabilize water-in-oil emulsion systems and achieves high thickening efficiency over a wide range of medium to high polar fluids after activation. Suitable solvents are all medium to high polar organic fluid systems, such as butyl acetate, ethyl acetate, caprylic/capric triglyceride, or isopropyl myristate. Additionally, CLAYTONE-VZ V XR is compatible with surfactants and emulsifiers.

Recommended use

Creams and lotions	■
Sunscreen products	■
Antiperspirants/deos	■
Liquid makeup	■
Lipsticks	■
Cream eye shadows	■
Nail polishes	■

■ especially recommended □ recommended

Recommended levels

1–10 % additive (as supplied) based upon the total formulation, depending on the application.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

CLAYTONE-VZ V XR is effective in a wide range of organic fluid systems and has no processing temperature requirements. For maximum efficiency, CLAYTONE-VZ V XR requires a polar activator and very high shear, e. g. dissolver, rotor-stator system, or homogenizer.

Suggested polar activators are:
- Propylene carbonate/H_2O (95:5) 15–40 %*
- Ethanol/H_2O (95:5) 15–60 %*

*based on weight of CLAYTONE-VZ V XR

It is recommended to incorporate CLAYTONE-VZ V XR into the solvent phase using a concentrated pre-gel. This is the preferred option for nail lacquers to obtain ultra-high gloss. In some cases, CLAYTONE-VZ V XR can also be incorporated directly as a powder into the oil phase (in-situ incorporation).

Pre-gels can be prepared by the following procedure:
1. Add the organic solvent to the dispersion vessel.
2. Slowly add CLAYTONE-VZ V XR (5–10 % by weight of total pre-gel) to mixer under agitation.
3. Mix at very high shear for approx. 15 minutes.
4. Add the polar activator.
5. Mix at very high shear for approx. 15 minutes.
6. Incorporate the other formulation ingredients into the gel.

When used in emulsions, CLAYTONE-VZ V XR should be incorporated into the oil phase.

Your local contact

BYK-Chemie GmbH
Abelstraße 45
46483 Wesel
Germany
Tel +49 281 670-0
Fax +49 281 65735

info@byk.com
www.byk.com