

VG-PLUS

VG-PLUS* organophilic clay is an improved viscosifier and gelling additive for all synthetic-base and VERSACLEAN* mineral oil-base systems.

VG-PLUS clay is an amine-treated bentonite that improves the carrying capacity, gel strength and suspension of weight material. It also assists in improving filter-cake quality and filtration control.

VG-PLUS clay has particular application in mixing plants. The product provides viscosity for building new fluids that have not been exposed to shear and temperature.

ADVANTAGES

- High-performance viscosifier for all mineral oil- and synthetic-base fluids
- Especially effective when mixing new fluids in low-shear, low-temperature situations such as in mud plants
- Increases viscosity for improved hole cleaning and weight-material suspension
- Improves filter-cake quality for reduced fluid loss
- Provides efficient gelling capabilities for blending casing packs and packer fluids

Typical Physical Properties

Physical appearance	Off-white to tan powder
Specific gravity	1.57
Bulk density	33 lb/ft ³ (528 kg/m ³)

APPLICATIONS

VG-PLUS additive is an effective viscosifier in mineral oil-and synthetic-base drilling, coring, workover and completion fluids. It can also be used in specialty fluids such as casing packs, packer fluids, lostcirculation pills and spotting fluids where viscosity is required.

The VG-PLUS product is used to increase gel strength and viscosity in mineral oil and synthetic-base muds. It is especially useful in blending plants where high shear and temperature are not available to obtain full dispersion and hydration. Although it provides more viscosity in these situations than other organophilic clays, even the VG-PLUS clay will not fully yield. For this reason, caution should be used to avoid overtreatment until the fluid can be circulated through the wellbore.

Typical concentrations range from 2 to 10 lb/bbl (5.7 to 28.5 kg/m³) for most drilling applications, depending on the base fluid and water content. For maintenance, occasional treatments should be added as needed to maintain the flow properties and gel strengths in the desired ranges. Specialty applications such as casing packs and packer fluids generally require concentrations in the range of 10 to 15 lb/bbl (28.5 to 43 kg/m³).

TOXICITY AND HANDLING

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheet (MSDS).

PACKAGING AND STORAGE

VG-PLUS viscosifier is packaged in 50-lb (22.7-kg), multi-wall, paper sacks.

Store in a dry, well-ventilated area. Keep container closed. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.