

Technical Data Sheet

coatings@laviosa.com

Industrial Additives Division Coatings

LAVIOSA VISCOGEL[™] SGM

LAVIOSA VISCOGEL[™] SGM is a rheological additive expecially designed for the use in lubricating greases. It provides the grease with the desired thixotropic effect, which is needed to work as a lubricant in mechanical equipment: a good flow at high shear and a rapid gel formation once in a quite state (shear thinning behaviour). The nature of LAVIOSA VISCOGEL[™] SGM is a bentonite clay, organically modified with a quaternary alkylammonium compound.

APPLICATIONS

LAVIOSA VISCOGEL[™] SGM is used in a wide range of grease manufacturing processes starting from petroleum derivatives and synthetic hydrocarbons. Using LAVIOSA VISCOGEL[™] SGM organoclay rheological additive in lubricant greases allow the finished product to be a non-melting-high temperature grease with good mechanical stability and a high water tolerance.

LAVIOSA VISCOGEL[™] SGM provides also good "bleed" resistance, so that no oil separate out from the grease.

INCORPORATION

LAVIOSA VISCOGEL[™] SGM belongs to the conventional type of organoclays group, which requires mechanical energy, shear forces applied with a good dispersion equipment, and a chemical (polar) activator to reach the proper level of delamination of the organobentonite platelet stacks. If an homogenizer at high pressure is present in the production line, polar activator could be avoided.

While heat is not essential in most cases, processing temperatures above 20°C are preferred.

Several methods can be used to incorporate LAVIOSA VISCOGEL[™] SGM in a lubricating oil:

1. The "simple mix" technique. LAVIOSA VISCOGEL[™] SGM is added to the base oil and mixed till wet.

2. The "cold concentrate" technique. LAVIOSA VISCOGEL[™] SGM is pregelled in a part of the base oil. After full activation the rest of the oil and the other additives are added to the concentrate and milled.

DOSAGE

Level of addition strongly depends on the type of oil system and on the degree of grease consistency to be obtained, which is generally measured by the penetration test..

STORAGE STABILITY AND PACKING

Product do not deteriorate in a significant way in a 36 months period, there is no exact expiring date for the product. Storage is advisable in a dry, sheltered place in closed bags. Packing is 25 Kg net paper bags on wood pallets of 1000 - 1,400 Kg each.