

Mixed Complex Sodium - Aluminium Soap Plastic Lubricant

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Abstract Grease, the most suitable and widely used plastic lubricant, is a fine dispersion of an oil-insoluble thickening agent- usually a soap- in a fluid lubricant which is generally mineral oil. The nature and amount of the thickener, the characteristics of the mineral oil, whether additives are used and the way the grease is made account for its properties.

The paper presents the principal requirements for lubricating greases, their classification, the composition of sodium and aluminium soap greases which are made in Romania and their disadvantages, such as : a low dropping point, reduced working life, presentation of undesirable phenomenon of thixotropy and a flow tendency from bearings inadequate behaviour. All these disadvantages required another type of grease, based on mixed complex sodium- aluminium soap, with higher performances. A new grease with special properties was formulated. This grease has higher performances than simple sodium and aluminium soap greases.

Keywords: greases, thickeners, soaps, oils, additives.
