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TECHNICAL REPORT

Technical improvements in
Ajusil silicone sealant



silicone sealant

novelty



more resistant
more flexibility
more quality

introduction

Ajusil is the best solution for sealing systems that do not use sealing gaskets. An excellent product within the Ajusa chemical line, Ajusil satisfies the highest exigencies of engines.

It provides great adhesion and resistance to the temperature of the car engine and to oils, water, antifreeze liquids, etc.

Innovation and continuous improvement are two of objectives for Ajusa, therefore, the company has developed and recently launched on the market, a

renewed and completely improved version of the Ajusil silicone sealant (references 75000100 and 75000200).

These improvements increase the **performance of the product**, **expand the application options** and **guarantee greater safety** in its operation.

new characteristics

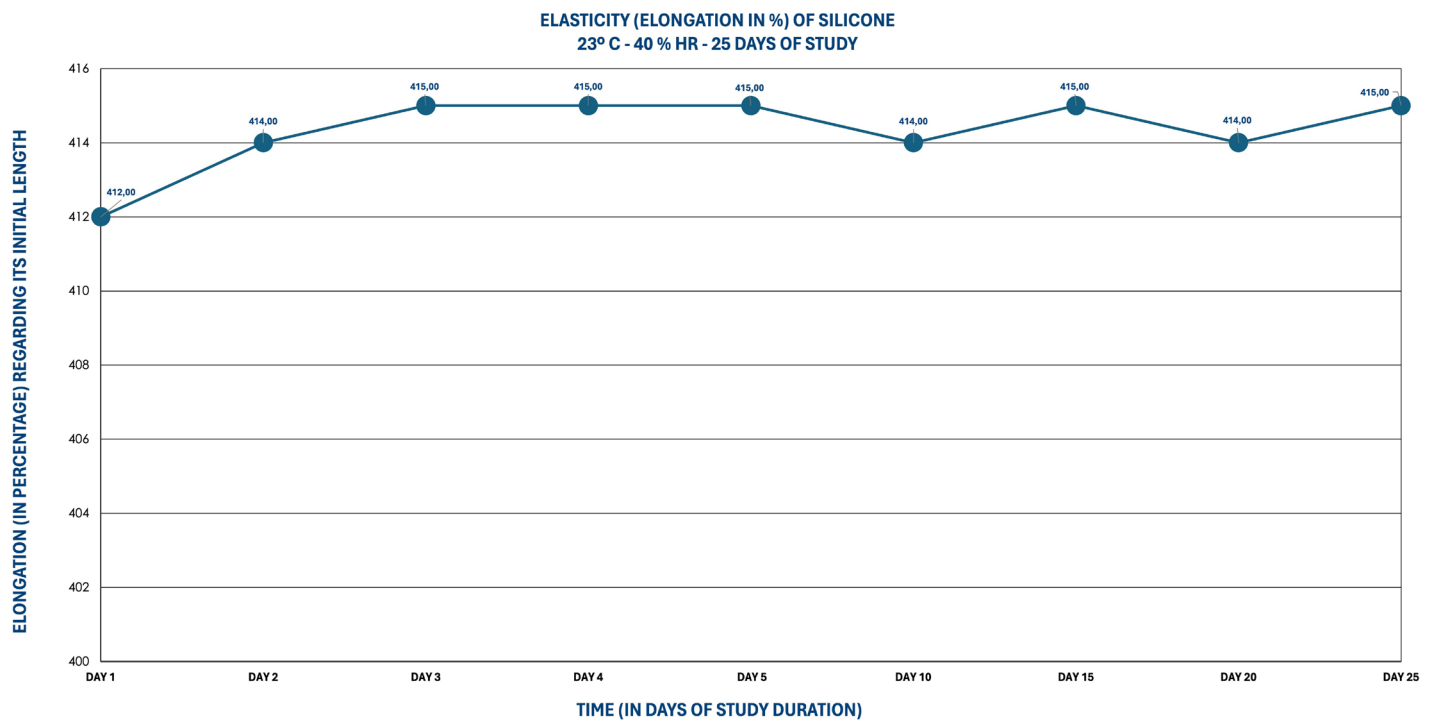
The improvement in the **efficiency of engines**, the **decrease in engine displacement** together with the **use of new coolants** that allow the engine to work at higher temperatures have been the reasons that have driven the Ajusa team to expand the thermal resistance of the product.

The maximum temperature to which the product resisted was 300°, which guaranteed very acceptable performance in use. Thanks to the improvements, the temperature it can withstand is **320° C at specific times**, and a resistance of 270° continuously.

The **density of the product has been increased**, achieving improvements such as an increase of 15% to 20% in density.

The elasticity of the silicone once vulcanized has also been increased. Thanks to this, possible cracks caused by vibrations with the passage of time and the increase in kilometers traveled will be avoided.

In the following graph you can see the evolution of elasticity in a 25-day study:

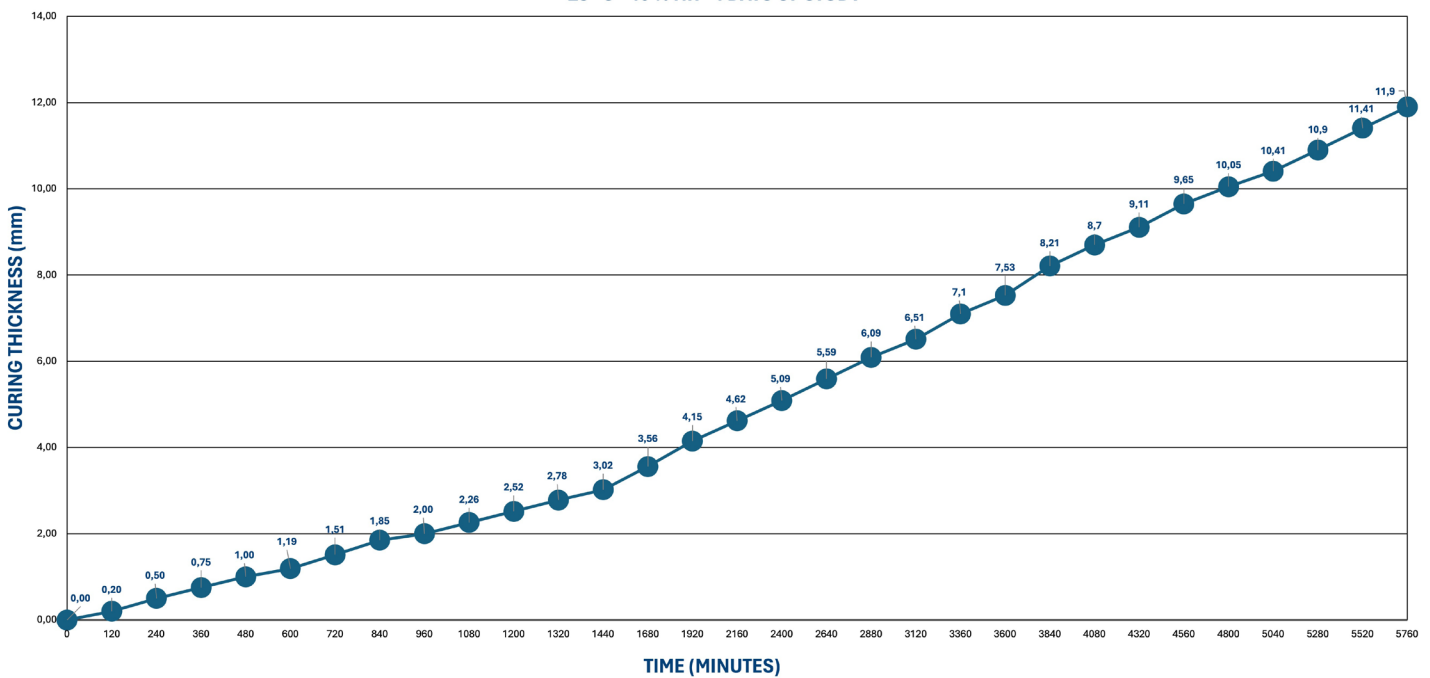


This increase in density leads to a **different curing**, which allows the sealant to remain flexible for longer (about 15–20 minutes) and therefore, leaving the mechanic a wider range of time to be able to assemble the engine, as well as the corresponding tightening.

Due to the **accelerated aging tests** that have been carried out in our Research and Testing Centre, it has been proven that elasticity increases both at room temperature and at elevated temperatures (in operation) and at short peaks of very high temperatures.

The **curing time** of Ajusil depends on several aspects, such as the amount of sealant applied (the thickness of the bead), ambient humidity and temperature. To ensure that the vulcanization is achieved 24 hours after application, a bead thicker than **3 mm should not be applied**. After these 24 hours, the engine can be started, with the guarantee that the silicone will not lose its elasticity. In the previous graph we can see the evolution of the data.

CURING SPEED IN RELATION TO THICKNESS
23° C - 40 % HR - 4 DAYS OF STUDY



About humidity and temperature, we can affirm that temperature has more influence. The higher the temperature, the sooner the sealant will cure. The presence of humidity is essential for curing, but it does not accelerate the vulcanization process.



You can now purchase this product with its new features! You will find it in two formats: 200 ml pressurized format (75000100) or 75 ml tube (75000200).

Remember to consult the **safety sheet** for this product and take into account the Ajusa recommendations: **keep away from any heat source**, wear **appropriate clothing** and gloves and carry out the process **in well-ventilated places**.