

Frictionless, lubricated-for-life, PFAS-free washer door opening mechanism

Sector: Manufacture of household appliances

Application: Washing machine door handle

Solution: GLEITMO WSP 5040

Challenge

A washing machine manufacturer company needs to **reduce the coefficient of friction in the door opening mechanism** in one of its models.

The parts of the mechanism are made of glass-fibre reinforced polyamide 6 and perform a 90° rotary movement. The mechanism is blocked when the washing machine is running.

Product requirements:

- be consistent and not migrate during use
- decrease friction and reduce wear between parts
- be resistant to humidity (max. 90%)
- not harden over time or due to temperature (max. 70°C)

Solution

GLEITMO WSP 5040 is a grease with good adhesion and a high percentage of solid lubricants in its composition, thus offering low coefficients of friction in sliding movements between two surfaces, while remaining between them for the lifetime of the washer. In addition, its light colour makes it clean and easy to identify, and it is available in different types of packaging, from aerosol or 1 kg cans to drums, making it suitable for most application methods, whether manual or automatic.

On the other hand, due to its calcium sulphonate thickener, it has a very high resistance to moisture and, in combination with its semi-synthetic base oil, a very good resistance to temperature and ageing.

Advantages

Reduction of the coefficient of friction

Lifetime lubrication in plastic-plastic contact

Moisture and temperature resistance

PFAS-free

CASE STUDY

Finally, but of great importance for the restrictions currently being discussed, its solid lubricant composition does not include PTFE, making it a paste totally free of per- and polyfluoroalkyl substances (PFAS).

Results

[GLEITMO WSP 5040](#) performed much better than other products in both coefficient of friction reduction and durability for the application, properties where its combination of solid lubricants was key to a marked improvement.

About PFAS

You can find more information on PFAS legislation and FUCHS' view on it at the following link:

[Everything you need to know about PFAS and PFAS-free lubricants | FUCHS LUBRICANTES, S.A.U.](#)



**Need more information?
Contact our expert team!**

 **+34 93 547 58 59**

 **info.es@fuchs.com**