

## Non-PFAS-Modified Tribological Compounds

### Innovative alternatives to classic compounds

The development and manufacturing of tribologically optimized plastics has been one of our main activities since the start of our compounding business in 1983. Through the incorporation of lubricants and reinforcing materials, we improve the wear, friction, and running-in characteristics of polymers, and hence of the tribological system as a whole.

Among the lubricants used are graphite, silicone oil, and PTFE. The latter is a fluoropolymer and belongs to the group of PFAS (per- and polyfluoroalkyl substances) products. In view of the current discussion about PFAS and with various agencies publishing proposals to ban their manufacture and use, the industry is searching for alternative products.

The LEHVOSS Group introduced the first non-PFAS-modified tribological compounds back in the 1990s. Since then, numerous series applications have been successfully implemented. The compounds are based on the most commonly used polymers such as PA66, PA46, PBT, PPS and PEEK (see next page) combining them with various additives and the use of nano-technology. You can trust in our expertise.

#### Our offer - your benefits:

- Development and supply of PFAS-free compounds based on all polymers
- Reliable and trusted quality
- Sound knowledge and experience in tribological applications
- In-house tribological testing equipment

#### Benefits over classical PTFE-modified compounds:

- Easier processing
- No PTFE deposits on tool surfaces
- Lower density (hence lower cost and weight)
- Enhanced mechanical properties
- Improved use in media (chemicals)

Read more on our blog:

[PFAS should be banned!? What now? And where do we stand in terms of replacing PTFE?](#)

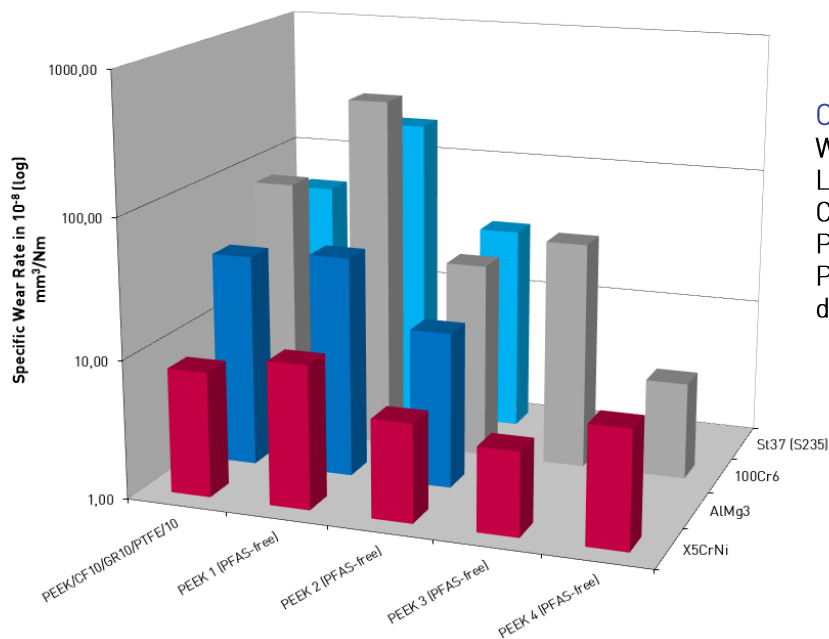


## Portfolio Overview

(more materials are available or being currently developed)

Grade	Color	Polymer	Alternative to classic
LUVOTECH PA66 GF30 TX HS BK	Black	PA66	PA66/GF/30/PTFE
LUVOCOM 1-50781/BK	Black	PA66	PA66/GF/50/PTFE
LUVOCOM 1-50793/BK	Black	PA66	PA66/GF/20/PTFE/SI
LUVOCOM 1-50730	Black	PA66	PA66/CF/20/PTFE
LUVOCOM 1-50765	Black	PA66	PA66/CF/30/PTFE
LUVOCOM 1-50720	Black	PA66	PA66/PTFE
LUVOCOM 19-50820/BK	Black	PA46	PA46/GF/30/PTFE
LUVOCOM 1850-50811/BK	Black	PBT	PBT/GF/40/PTFE
LUVOCOM 1301-7815	Black	PPS	PPS/CF/10/GR/10/PTFE
LUVOCOM 1301-50728	Yellow	PPS	PPS/AF/PTFE
LUVOCOM 1301-50729	Gray	PPS	PPS/AF/PTFE
LUVOCOM 1105-50760	Natural	PEEK	PEEK/GF/15/PTFE
LUVOCOM 1105-7678	Black	PEEK	PEEK/CF/10/GR/10/PTFE/10
LUVOCOM 1105-8160	Black	PEEK	PEEK/CF/10/GR/10/PTFE/10

GF = glass fibers, CF = carbon fibers, SI = silicone oil, GR = graphite, AF = aramid fibers



### Outstanding performance

Wear of tribological, PFAS-free LUVOCOM PEEK compounds. Compared to the classic 10/10/10 PEEK (10% each CF, graphite and PTFE). Testing conducted with different counterpart materials.

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