Dr. Tillwich GmbH
Werner Stehr

Product Specifications

Antispread F 2/50 FC 60

Article No. TE1205

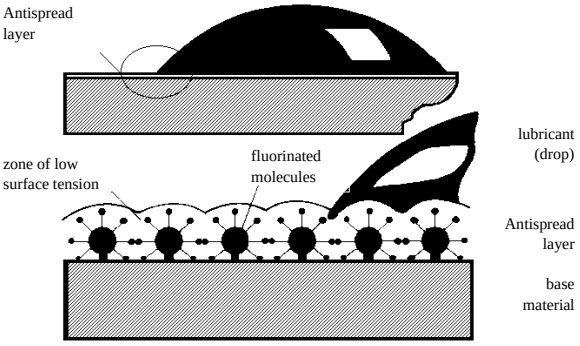
Epilamisation Agent For Metals And Plastics

Technical Information:

Function:	the agent polymerizes on the solid surface on evaporation of its solvent.
Film Thickness:	approx. 0.04 µm (F2/50).
Active Ingredient:	fluorinated polymer (solid) with a repelling effect on all known lubricants.
Solvent:	**Fluorcarbon 60 (FC 60)**; perfluorinated organic compound (contains no chlorine).
Thermal Stability (film):	-75°C to +200°C [-103°F to +392°F].
Density:	1.7 g/cm^3 at 20°C [+68°F].
Color:	colorless.
Boiling Range:	30°C - 60°C [86°F - 140°F].
Inflammability:	not flammable.
Coverage:	approx. 100 g/m^2, depending on method of application and type of parts.

Compatibility with Plastics:

compatible:	POM, PBT, PA66, PC, PPOX, ASA, ABS.
Efficacy:	on all materials, execpt PTFE.
Toxicology:	physiologically harmless, if used properly; details see safety data sheet.



The Antispread coating acts as a network whose fluorine “bristles” repel the lubricant.

Test Of Efficacy:

Apply drop of test fluid of 1 mm diameter to treated parts. Over 4-hour period, area covered by drop may not become bigger. Contact angle must be between 5° and 45° at room temperature.

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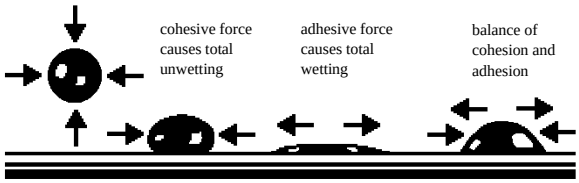
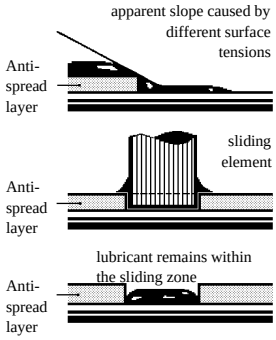


Antispread reduces the surface tension of the solid as far as silicon oil can’t spread any more.

Lubricant creeps to the untreated area.

Epilam layer is removed by friction.



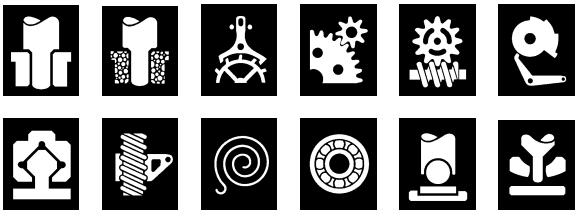
If possible sliding elements should be allowed to work without lubrication for a short time, thus the Antispread layer being removed and the lubricant applicated remaining precisely at the point or area of friction.

Directions:

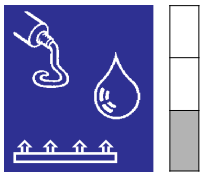
Cleaning:	surface contaminants, such as corrosion inhibiting oils, detaching fluids and water must be removed before using Antispread.
Immersing:	5-10 seconds at room temperature.
Spraying:	caution, use only in well ventilated areas.
Brushing:	should be done rapidly. Antispread is highly volatile.
Stamping:	a circular stamp can be used to build a barrier.
Drying:	approx. 10 seconds at room temperature. Warm air speeds up the process.

Application:

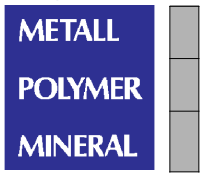
The use of Antispread is recommended for precision and for lifetime lubrication in precision machinery. The use of Antispread is essential for the silencing effect of high viscous lubricants in quartz clocks with step motors. The use of Antispread is imperative for the lubrication of plastics.
For dented wheels, bottom plates, electric contacts, printed circuit boards, ball bearings, sensitive machine tools, counters, printers, open bearings. Using the system bearing/shaft both parts, bearing as well as shaft must be treated with Antispread.



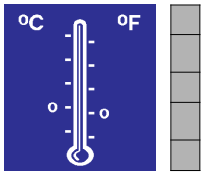
Product



Bearing material



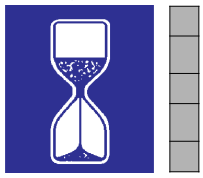
Application temperature



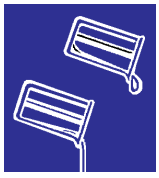
Bearing load

Sliding speed

Durability



Viscosity



Wetting

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