Polymist® XPP 527S

polytetrafluoroethylene

Polymist® XPP 527S is a white PTFE micronized powder composed of discrete particles.

Designed for use in critical engineering and high end performance plastics applications, Polymist® XPP 527S will improve wear resistance and reduce coefficient of friction.

Main features are:

- Better wear resistance
- Increased pressure x velocity (PV) limits
- Reduced friction
- Improved stick-slip response
- Improved mold release

General		
Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• North America
Uses	• Additive	
Appearance	• White	
Forms	• Powder	

Physical	Typical Value	Unit	Test method
Average Particle Size - D50	30	µm	Internal Method
Bulk Density	500	g/l	Internal Method
Specific Surface Area	3.0	m²/g	Internal Method

Thermal	Typical Value	Unit	Test method
Melting Temperature	325 to 335	°C	ASTM D3418

Additional Information

Processing

Polymist® XPP 527S can be used in a wide variety of different thermoplastics.Typical loading are 5-20% by weight of the compound and the optimum loading is dependent by the resin type and the desired final properties of the part.

Besides its main function as a friction and wear additive, Polymist® XPP 527S can be also used at lower concentration to provide the following properties:

- Processing aid to improve compounding and molding conditions
- Mold release agent due to non-stick properties

Polymist® XPP 527S can be incorporated into thermoplastics by pre-mixing or co-feeding with the base polymer using standard industrial equipment and technology. The compound can also be prepared by first using a masterbatch.

Storage and Handling

- The usual precautions for safe storage and handling of Polymist® XPP 527S should be taken according to material safety documentation and experience. There will be no chemical deterioration of Polymist® XPP 527S micronized powders during proper storage.
- Shelf life of Polymist® XPP 527S micronized powders will vary depending upon whether the recommended storage conditions are maintained and whether the material remains free from foreign contamination during storage time (not exposed to dirt, dust, water or other chemicals). The material should remain sealed in the original containers and storage conditions should provide for protection from temperature extremes as well as rain, snow or other wet environments (or such conditions which may damage the storage containers in which the product is stored).

Safety and Toxicology

- Before using Polymist® XPP 527S micronized powders consult the product Material Safety Data Sheet and follow all label directions and handling precautions.
- Handling and processing should only be carried out in well ventilated areas. Vapor extractor units should be installed above processing equipment. Fumes must not be inhaled and eye and skin contact ought to be avoided. In case of skin contact, wash with soap and water. In case of eye contact, flush with water immediately and seek medical help.
- Do not smoke in areas contaminated with powder, vapor or fumes.
- See Material Safety Data Sheet for detailed advice on waste disposal methods.

Packaging

- Polymist® XPP 527S is packaged in 25 kg nonreturnable drums. Each drum contains two bag liners made of polyethylene resin.

Notes

Typical properties: these are not to be construed as specifications.