

PTFE Zonyl™ Micropowders

Part of the Chemours family of fluoropolymers, this product is a white, free-flowing polytetrafluoroethylene (PTFE) resin used as an additive in other materials and systems.

Unlike PTFE granular and fine powders, Zonyl™ PTFE Micropowders have:

- Smaller particle sizes ranging from 2 to 20 µm
- Lower molecular weight
- Different particle shapes and morphology designed to easily blend with other materials

Depending on how they are handled and processed, Zonyl™ Micropowders provide nonstick properties and improve lubricity, wear resistance, and reinforcing properties.

Zonyl™ Micropowders are primarily intended for use as additives in mixtures with other solid or liquid materials that can:

- Enhance abrasion resistance
- Reduce the coefficient of friction and mechanical wear
- Reduce surface contamination
- Modify appearance

A wide variety of industries depend on PTFE Micropowders for specific benefits, such as their ability to infuse hosts with some of PTFE's more unique properties.

Some applications include:

- **Thermoplastics:** parts made with the addition of Zonyl Micropowders, like gears, benefit from improved wear resistance, reduced friction, and elimination of stick-slip behavior.
- **Elastomers:** Standard elastomer processing methods can be used to incorporate PTFE Micropowders to enhance wear resistance, reduce friction and facilitate mold release.
- **Lithographic, flexographic, and gravure inks:** Zonyl™ Micropowders give better image protection and higher productivity, on top of better slip and surface smoothness,

- **Greases:** PTFE Micropowders properties, such as chemical inertness and non-flammability, are key elements for greases to obtain approval to operate in environments where gases and other hazardous products are present.
- **Coatings:** The main benefits provided by Zonyl Micropowders are abrasion resistance and anti-friction properties, especially important on coatings for Industrial applications.
- **Paints:** the addition of PTFE Micropowders helps paints have easier cleanability thanks to improved anti-fouling properties, and present easier higher spreading rate thanks to the extra lubricity provided.

Most PTFE MicroPowders are made thru a controlled irradiation or thermal degradation of PTFE feedstock to produce a low molecular weight PTFE. This irradiation process has the potential to produce low levels of perfluoroalkyl carboxylic acids in the presence of oxygen and moisture, one of which is perfluorooctanoic acid (PFOA).

Recently, the EU has taken measures to regulate PFOA, its salts and related substances in a wide range of products under the EU REACH program. The new regulation requires that, subject to certain exceptions, as of July 4, 2020, mixtures and articles placed on the market in the European Union will have to meet the concentration limits set under Annex I to Regulation (EU) 2019/1021 (EU Persistent Organic Pollutants Regulation).

Based on rigorous testing of representative samples, Chemours™ Zonyl™ PTFE MicroPowders comply with Annex I to Regulation (EU) 2019/1021. Currently Chemours™ has multiple MicroPowders offerings that contain less than 25 ppb of PFOA.

For details of the test method, click on the link below:

Chemours Standard Fluoropolymer Extraction Method

Should you wish to know more, you can contact Chemours™ at www.chemours.com.

