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TM-10

Poly Ethylene Terephalate-PET, micronized to D50 of 10 microns.

Micronization

- We have developed a rheological adjustment process in the pet structure, which allows us to micronize the average granulometry of 10microns.
- In this granulometry the polymer enters the formulation of polyurethane foams, as an additive and never as a load.
- One of the advantages is the absence of ashes.

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From the Application

- The Micronized Pet TM10, should be added to the conventional polyol.
- Enter the formulation of polyurethane foams of any density.
- Its primary function is to increase density and hardness, without prejudice to resilience.
- Because it is a polyester polymer the TM10, it enters the formulation as an additive, since its components (glycol and carboxylic) react with the other components of the formula.
- The reaction with the other components is only possible due to the modification in the polymer molecule and its size, which ranges from 0.1micron to 20microns, with a D50 of 10 microns.

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From the Application

- Because it is a TM10 polymer, it can be added to the formulation by up to 40%
- It can be as a substitute for part of the polyol, or only as a density-increasing agent.
- Its application has the additional advantage of not appearing ashes in the burn test, since its components (glycol and carboxylic) react chemically with the other components of the formula.

Final Consideration

- After several studies and tests we are safe to state that the TM10, micronized pet, is able to be applied in the formulation of polyurethane foams, of any density,
- And fully achieves its goals of increasing density, hardness, without prejudice to resilience,
- That the use of the TM10 does not represent a decrease in the final quality of the foam,
- That the use of TM10 represents cost reduction,
- That the use of TM10 is in accordance with the most modern techniques of sustainability and ghg emission reduction.

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THANK YOU

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