



DATA SHEET
NYACOL® NYASIL 20
AMORPHOUS SILICA

NYACOL® NYASIL 20

Nyacol® NYASIL 20 is a nano-structured amorphous silica powder of 140 m²/g surface area and moderate pore volume. The average particle size of 1.5 microns is well suited for use in many applications. The product is low in iron, low in soluble salts and essentially chloride/sulfate free.

In PET film applications, the powder can be added in PET synthesis. The typical dosage is 500-800 ppm as SiO₂ which enables production of high transparency, low haze film.

The product can also be compounded into PET master batches using extrusion compounding. The typical pre-drying requirements for PET compounding should be followed to minimize the potential for moisture related degradation of the PET.

In PE/PP films, NYASIL 20 provides excellent highly transparent anti-blocking. The 1.5 micron average size is especially useful for thinner films, such as 10-20 micron thickness. The low iron and low electrolytes of the product help with resin color, and the moderate pore volume reduces slip aid absorption.

TYPICAL PROPERTIES

Appearance	White Powder
pH (5 wt% Aqueous Slurry)	4
Free Moisture, % (Loss after 2 hrs., 105°C)	2
Loss on Ignition, % (Loss after 2 hrs., 1000°C)	7
Bulk Density, Untamped, g/cc	0.29 (17.9 lb/ft ³)
Bulk Density, Tamped, g/cc	0.32 (20.2 lb/ft ³)
Mean Particle Diameter, µm D(v,0.5) (Malvern Mastersizer S)	1.5
Oil Absorption, g Oil/100g Powder (ASTM D1483-84)	80
Specific Surface Area, m ² /g	140

FOR ADDITIONAL INFORMATION OR TO PLACE AN ORDER

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