HORIBA Scientific

Application Note

Magnesium Silicate (TALC)

ADS101

Magnesium Silicate (Talc)

Introduction

Talc is a naturally occurring mineral ranging in color from white to various shades of gray and green. Some talc is red to brown, usually the result of impurities. Talc is used in a wide range of manufactured products; it can be found in paper (as a filler), face and talcum powder, soap, fireproof roofing, lubricants, electrical insulation, and pottery.

It is used in cosmetics as filler and as an absorbent. These final products are a mixture of many different components, so the talc is usually measured prior to mixture. Particle size is important to final product surface quality (cosmetics) or mechanical strength of the product.

Analytical Test Method

RI (particle): 1.57-0.10i

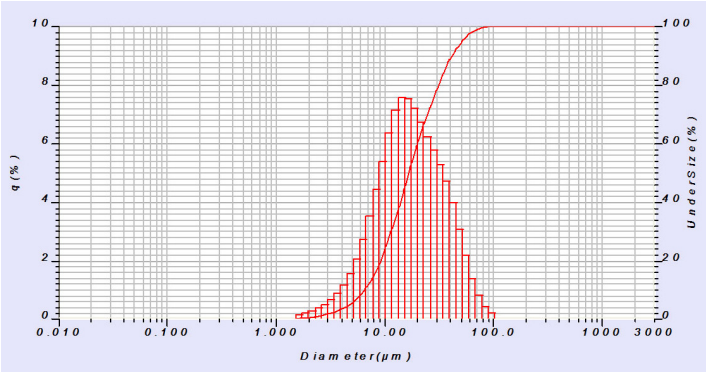
Dispersant fluid: Water, 0.1% sodium pyrophosphate

Sonication: None

Circulation speed: 5

Agitation speed: 2, continuous

Note: Talc can be hydrophobic and difficult to wet in some instances. In this case, wet a small amount of sample to a paste with a 50% mixture of water and Micro-90 or isopropyl alcohol.



Example data

Median:	16.70 µm
Mean:	21.06 µm
D(10%):	6.59 µm
D(90%):	41.94 µm