

### Technical Data Sheet

Material Designation

VSS<sup>®</sup>

Material Properties  
Summary

- Binderless*     *Organic Binder*     *Double Laminated*  
 *Acrylic Binder*     *Laminated*     *Hydrophobic*

This binder free material is manufactured using a proprietary glass chemistry which permits usage in high heat applications beyond typical borosilicate glass blends. Ideally suited for determination of "Fixed & Volatile Solids Ignited at 550°C" method 2540E. Low fiber shedding improves quality assurance of test results and low percentage of weight loss when used in gravimetric tests. High loading capacity is an attribute of the high surface area and complex pore structure.

Material is also compliant with the requirements of standard method 2540C & 2540D as well as EPA Method 160.2 for establishing water quality in suspended solids content. Total Suspended Solids (TSS) are defined as those which are retained by a "Glass-fiber filter disk without organic binder".

Widely used in air pollution monitoring, high temperature flue gas and filtration of high temp. solvents.

#### Micron rating

1.5

$\mu\text{m}$

#### Basis Weight

39

*lbs/3,000 ft<sup>2</sup>*  
TAPPI Method T410

#### Caliper Thickness

0.011 - 0.015

*inches - 4 psi*  
TAPPI Method T411

#### Mean Pore Size

-

$\mu\text{m}$

#### DOP Smoke Penetration

.02

*% at 0.3  $\mu\text{m}$  @  
10.5 ft/minute*

ASTM Method D-2986

#### Air Flow Resistance

34 - 37

*mm H<sub>2</sub>O @  
10.5 ft/minute*  
ASTM Method D-2986

#### Tensile Strength MD

3.0

*lbs / inches*  
TAPPI Method T494

#### Tensile Strength CD

2.0

*lbs / inches*  
TAPPI Method T494

#### Dry Elongation MD

3.0

%

TAPPI Method T494

#### Dry Elongation CD

4.0

%

TAPPI Method T494

#### Frazier Permeability

-

*ft<sup>3</sup> / min / ft<sup>2</sup> @  
0.5in H<sub>2</sub>O W.G.*

ASTM Method F778-82

#### Gurley Stiffness

-

*mg*

TAPPI Method T543

#### Water Repellency

-

*Inches H<sub>2</sub>O*

#### Ignition Loss

Binderless

*% Loss*

**Comments:** *Initial Filtration Speed (secs/100ml) = 47-52  
Wet Burst (kPa) = 3.7-4.1  
Wet Burst (psi) = 0.54-0.58  
Color white, surface smooth & very soft.*

Actual filtration performance, i.e. efficiency and dust holding capacity, will vary depending upon filter design parameters and the normal variation of the media properties consistent with the specification range. We continuously strive to define our products and hence the specifications are subject to change.