

## SDI - Silt Density Index - TEST

**Tested material:** Nature Works Hi-Tech Glass filter Media

**Test location:** Appolo Nursing College  
Ayanambakkam Rd  
Chennai, Tamil Nadu, India

### Test Conditions:

- Filtration flow: 300 lph
- Filtration velocity - 10m<sup>3</sup>/hr/m<sup>2</sup>
- Kind of filter - FRP
- Height of media inside the filter: 60 % filling
- Quantity of media: 60 kgs
- Vessel size - 8" diameter x 44" height on straight

### SDI RESULTS:

Morning inlet SDI without backwash- 5.46

Evening outlet SDI without backwash- 2.74



### PROCEDURES:

Calculations  $SDI = P30 / Tt = 100 * (1 - Ti / Tf) / Tt$

where SDI = Silt Density Index

P30 = % plug gage at 30 psi feed pressure\*\*

Tt = Total test time in minutes (usually 15 minutes, but may be less if 75% pluggage\*\* occurs in less than 15 minutes).

Ti = initial time in seconds required to obtain sample.

Tf = time required to obtain sample after 15 minutes (or less).

Person in charge of the test:

Sign / stamp

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