

# Polyacrylonitrile (PAN)

## Technical Data Sheet (TDS)

### Description

PSPL PAN Fibers are very fine, dry polyacrylonitrile fibers with a high resistance to chemicals, physical stress and UV radiation. Available in a variety of cut lengths (mm): 1.5, 2.0, 3.2, 4.0, 6.4, 8.0 and 12.0. Typically used at a dosage rate of 1.5 lbs/yd<sup>3</sup> (0.9 kg/m<sup>3</sup>).

### Specifications:

Parameters (units)	Specifications
Appearance	Bright, yellow-gold colored fibers
Specific density, approx.(g/cm <sup>3</sup> )	1.18
Water content (%)	1±1
Polyacrylonitrile content (%)	>97
Fiber count (dtex)	0.8-1.5
Nominal diameter (μm)	7.1-12.7
Tenacity (N/mm <sup>2</sup> )	>721
Elongation at break (%)	<13
Elastic modulus (N/mm <sup>2</sup> )	>16774
Length Range:	1mm, 1.5mm, 2mm, 3mm 6mm, 12mm, 16mm, 19mm
Decomposition Temperature:	626oF / 330oC Acid
Melting Point:	>258°C
Ignition point:	>550°C



### Features and Benefit

1. The product has excellent lost circulation properties and is effective for returning circulation in porous formations.
2. It can bridge gaps and provide support and suspension to the slurry design, resulting in good improvements to bond logs.
3. The product can prevent shrinkage of the cement, making it a reliable choice for any cementing application.
4. It has little effect on the rheology and viscosity of the cement slurry, ensuring consistent results.
5. The product outperforms Nylon and Polypropylene Based LCM Fibers in terms of its lost circulation properties, making it a superior choice for any drilling project.

## Packaging/Storage

20 Kg Bags

Store in a dry area protected from moisture.

## Health and Environmental Data

Before handling or using this product please refer to the Safety Data Sheet for complete health,safety and environmental information. Dispose of waste in accordance with local, state and federalization

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