

**For more information,
please contact:**

Norafin Industries (Germany) GmbH

Gewerbegebiet Nord 3
09456 Mildenau
Germany
Tel. +49 3733 5507 0
info@norafin.com

Norafin (Americas) Inc.

111 School House Road
Mills River, NC 28759 | USA
Tel. +1 828 435 7000
Fax +1 828 393 0921
info-us@norafin.com

www.norafin.com



Nonwovens for acoustical applications

End uses

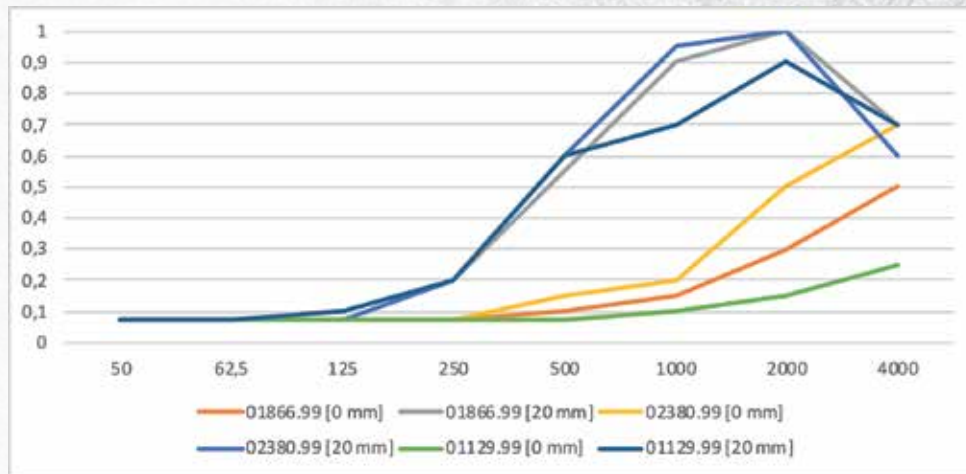
- Noise insulation:
 - Public transport: trains, aircrafts
 - Automotive: dashboard, panels, headliner, parcel shelf
 - Buildings: floor and ceiling panels, room dividers, acoustic panels
- Acoustical improvement
 - Sound design

Performance Characteristics

- Various colors
- Different structures/patterns
- Synthetic as well as natural fibers (flax, viscose, PLA, wool, cotton...)
- Weight range:
 - Spunlace: 16 - 500 g/m²
 - Needlepunch: 60 - 1.000 g/m²
- Multiple aftertreatment options:
 - Dirt repellent
 - Flame retardant
 - Water repellent



Norafin serves industrial markets offering high-quality, custom engineered spunlaced and needlepunched materials targeting a wide range of market segments including aviation, public transport and interior fitting. Norafin's nonwoven acoustic materials offer important product features answering the market's requirements for durable, flame retarding and functional fabrics.






x-axis: frequency [Hz]

y-axis: absorptivity

measurement: Impedance tube (Kundt); measured by the Institute of Acoustics and Haptics TU Dresden; test caliber 34 mm & 100 mm

MAIN MATERIALS:

Norafin items	Standard	01129	01866	02380
Composition		65% flax 35% viscose	80% PET 20% Bico	70% PLA 30% viscose
Structure/Finish		Coarse apertured	Flat	Flat
				
Technique		Spunlace	Needlepunch	Needlepunch
Weight (g/m ²)	DIN EN 29073-1/ ISO 9073-1	350	500	500
Thickness (mm)	DIN EN 29073-2/ ISO 9073-2	1,56	4,84	5,59
Air permeability (l/dm ² /min)	DIN EN ISO 9237	130	330	250
Absorption*	measured with no wall distance	0,16	0,27	0,4
	measured with 20 mm distance to the wall	0,71	0,77	0,78

*averaged frequency-independent absorption value α_{fu} (50-6.400 Hz) measured with impedance tube (Kundt)

