

■ Key Applications

Smart Speakers

- Speaker
- Microphone

Smartphones/Tablets

- Speaker
- Microphone

Earphones/Headsets

- Speaker
- Noise Filtering

Audio Systems

- Speaker

Additional Applications :

- Automotive speakers
- Laptop speakers
- Wearable devices (smart watches, glasses, etc.)
- Hearing aids
- Conference systems

■ Our Acoustic Mesh Policy

We provide prompt solutions through safe and reliable products based on the latest in Japanese technology. Since our founding in 1934, we have amassed decades of experience with weaving, dyeing, and fabricating mesh and molded filters. Through our proprietary nanotechnology and mesh technologies, we deliver highly functional, high quality mesh that supports each customer's unique application.

MADE IN JAPAN!

■ Product Updates

Our thinnest ever polyester thread at 19 microns in diameter

One of the thinnest threads in the industry makes for an incredibly dust-proof mesh with the same airflow resistance but smaller mesh openings.

Block the dust but let the sound through!

Liquid Crystal Polymer (LCP) mesh—Not just for screen printing!

Our LCP mesh boasts a number of unique properties including: high tensile strength, low elongation, high thermostability, high chemical resistance, low water absorption, and high vibration dampening properties.



[View the complete NBC Acoustic series lineup](#)

Materials

- ◆ Polyester (including the thinnest thread in industry at 19 microns)
- ◆ Polyamide (Nylon)
- ◆ Liquid Crystal Polymer (LCP)
- ◆ Metal (SUS304, SUS316, Tungsten, etc.)

We carry a variety of materials!
[View the complete list here.](#)

Fabrication/ Treatments

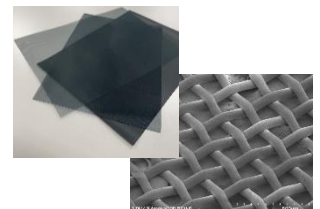
- ◆ Water repellent processing
- ◆ Dyeing
- ◆ Slitting
- ◆ Punching
- ◆ Mesh inserted molding
- ◆ Dust, water, and oil repellent (Nafitec™ treatment) (*)
- ◆ Antiviral and antibacterial (Cufitec™ treatment) (* 2)

Office Locations

- ◆ Japan
- ◆ China
- ◆ USA
- ◆ Germany (EU)

We offer support not only from Japan, but through our group companies across the globe.

[Find more information here.](#)



NBC Acoustic Series mesh

[Contact us today!](#)

NBC Meshtec inc.

www.nbc-jp.com

Industrial Applications Sales Dept.

Industrial sales Team

sanshi_nbc@nissin.com

(*) [Click here](#) for more information about Nafitec™ treatment, including its anti-dust and water and oil repellent properties.

(* 2) [Click here](#) for information on Cufitec™ treatment which features antibacterial and antiviral properties.



The most advanced mesh technology in the world.

PRODUCT UPDATE

Acoustic Mesh Series

Thin thread Polyester for Acoustic Applications

NBC Meshtec inc.

www.nbc-jp.com

Industrial Applications Sales Dept.

Industrial sales Team

Mail to: sanshi_nbc@nisshin.com

› [Click here](#) or [email us](#) for more information!

New!



Acoustic Mesh Series ~ Thin Thread Polyester

■ Super Fine Mesh:

Our thinnest diameter synthetic thread—**19 micron** Polyester

Product Code	Specific Airflow Resistance (MKS Rayls) (Pa·s/m)	JIS Air Permeability (cc/cm2/sec)	Mesh opening (µm)	Open Area (%)	Thread diameter (µm) Warp/Weft
A085	85	140	20	24	24/19
A080#3	80	150	24	28	24/19

±10%**

****Reference value based on prototypes**

- 1) Tighter specific airflow resistance tolerance
- 2) Excellent acoustic performance and dust resistance
- 3) Excellent water & oil repellency

Product Code	Water Repellency	Oil Repellency
A080#3 BH-LH	☉ Contact angle > 140 degrees	○ Contact angle > 120 degrees
A085 BH-LH	☉ Contact angle > 140 degrees	○ Contact angle > 120 degrees

*BH-LH: Black Hydrophobic-Low Halogen

*These values have been measured from actual mesh samples and are intended only as a reference.

■ Improved Acoustic Performance & Dust Resistance

① Same mesh opening but **1.5 times higher air permeability***

High Acoustic Transparency!

Product Code	Specific airflow resistance (MKS Rayls) (Pa·s/m)	JIS Air Permeability (cc/cm ² /sec)	Mesh opening (μm)	Open Area (%)	Thread diameter (μm)
New! A-080#3	80	151.8	24	28	24/19
A-121	121	104	23	21	27/27
A-124	124	101	25	21	30/30

② Same airflow resistance but **approx. 50% smaller mesh opening***

High Dust Resistance!

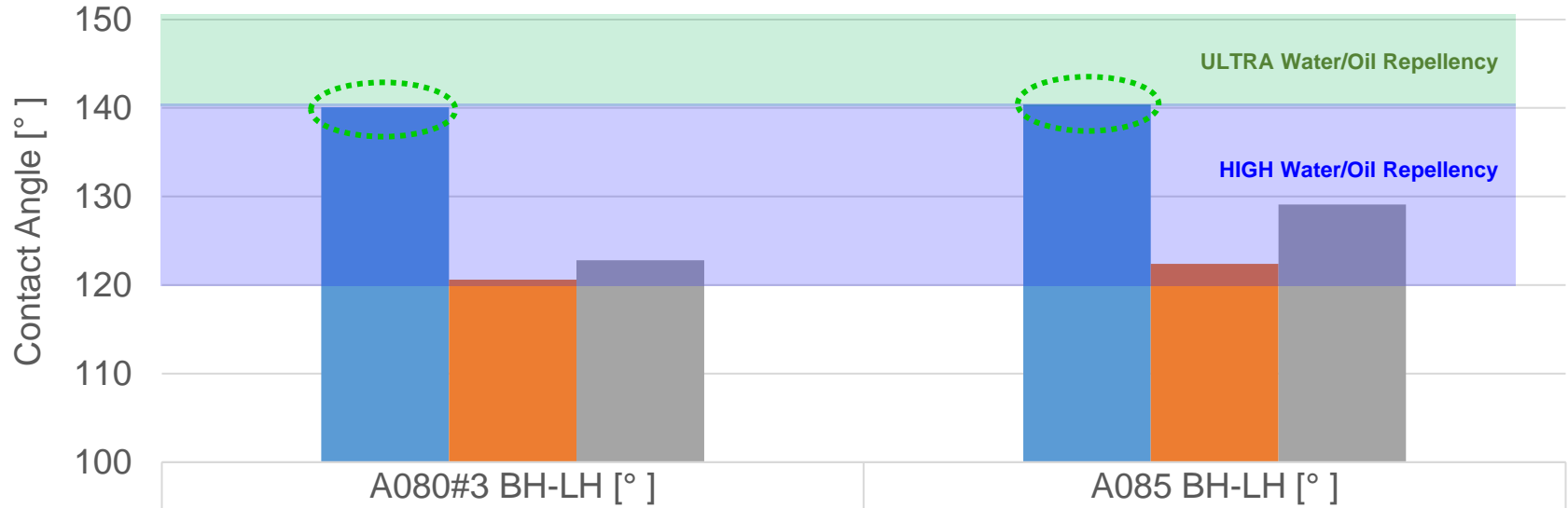
Product Code	Specific airflow resistance (MKS Rayls) (Pa·s/m)	JIS Air Permeability (cc/cm ² /sec)	Mesh opening (μm)	Open Area (%)	Thread diameter (μm)
New! A-080#3	80	151.8	24	28	24/19
A-080	80	138	45	28	40/40

High-performance mesh that blocks dust but lets sound through!

* In comparison with our existing Acoustic Series mesh

■ A080#3 BH-LH

■ A085 BH-LH



	A080#3 BH-LH [°]
Water	140.1
Diiodomethane	120.6
Artificial Sebum	122.8

	A085 BH-LH [°]
Water	140.4
Diiodomethane	122.4
Artificial Sebum	129.1

**Water repellency is in ULTRA range.
Oil repellency is in HIGH range.**

**Water repellency is in ULTRA range.
Oil repellency is in HIGH range.**

***The following criteria are used to classify each level of water/oil repellency**

- Water repellency: ≥ 90 degrees;
- High water repellency: ≥ 110 degrees;
- Super water repellency: ≥ 150 degrees.

***These values are for reference only and are not guaranteed.**

- ✓ **Advanced Quality Control:** $\pm 10\%$ ** tolerance for specific airflow resistance
 - $\pm 10\%$ ** tolerance achieved through “Made in Japan” quality control and advanced **NBC Mesh Technology**
 - Less variation of specific airflow resistance enables precise control of acoustic resistance
- ✓ **Industry-Leading Acoustic Transparency and Dust Resistance**
 - Maximize acoustic device performance through the best in dust-proofing and acoustic transparency
- ✓ **Greatly Improved Water & Oil Repellency**
 - Improve product reliability with enhanced water and oil repellency thanks to the thinnest thread polyester mesh we’ve ever produced

**Reference value
based on prototypes