

"NASBIS" Insulating Sheet

Type: **EYGY/EYGN**

"NASBIS" is a heat insulating sheet, which is composed of silica aerogel and fiber sheet, created through impregnation process. Pore size of silica aerogel is 10 to 60nm, which means it has smaller space than the mean free path of the air, 68nm. Air molecules do not collide against each other inside the pores, and thus the component shows excellecnt heat insulation performace.

Furthermore, combining NASBIS and PGS Graphite Sheet enables controlling the direction of heat. Composite type provides greater heat insulating performance.



Features

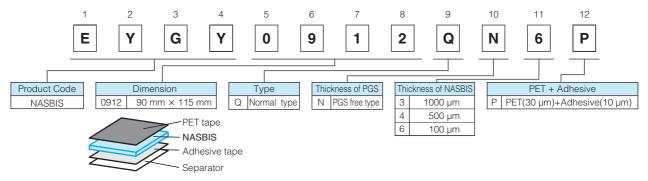
- Low thermal conductivity : 0.020 W/m ⋅ K typ.
- Created thin-film sheet; Thickness: 100 μm to 1000 μm
- Various proposals are available when combined with PGS Graphite sheet
- RoHS compliant

Recommended applications

• Smartphone, Wearable equipment, Digital Still Camera, Notebook PCs, Tablet PCs

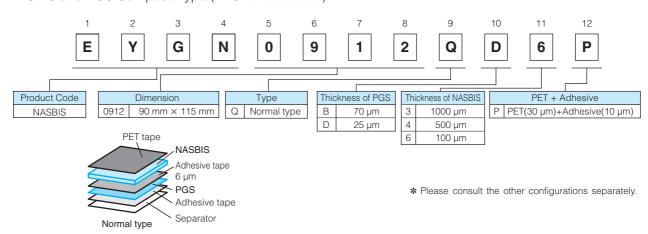
Explanation of Part Numbers

■ NASBIS Pouch Type (EYGY**********)



* Please consult the other configurations separately.

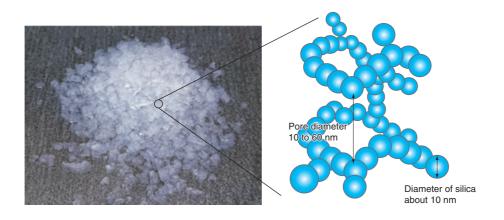
■ NASBIS and PGS Composit Type (EYGN************)



| Characteristics of NASBIS | | | | | |
|----------------------------------|----------------|----------------|----------------|--|--|
| Thickness | 100 μm | 500 μm | 1000 μm | | |
| Thermal conductivity (W/(m·K)) | 0.018 to 0.026 | 0.018 to 0.026 | 0.018 to 0.026 | | |
| Operating temperature limit (°C) | -20 to 100 | -20 to 100 | -20 to 100 | | |
| Size / Laminate pouch (mm) | 90 × 115 | 90 × 115 | 90 × 115 | | |
| Heatproof temperature(°C) | 100 | 100 | 100 | | |

Typical values, not guaranteed.

Appearance of silica aerogel and its nanostructure





Composition example

NASBIS Pouch Type

| Туре | | Y - P type |
|-----------------------|----------------|------------------------------------|
| Structure | | PET 30 μm NASBIS* Adhesive 10 μm |
| Heatproof temperature | | 100 °C |
| 100 µm* | Part No. | EYGY0912QN6P |
| | Thickness (µm) | 140 |
| 500 μm* | Part No. | EYGY0912QN4P |
| | Thickness (µm) | 540 |
| 1000 µm* | Part No. | EYGY0912QN3P |
| | Thickness (µm) | 1040 |

NASBIS and PGS Composit Type Normal type

| - | Гуре | N - P type | N - P type | |
|-----------------------|----------------|--|--|--|
| Structure | | PET 30 µm NASBIS* Adhesive 6 µm PGS 70 µm Adhesive 10 µm | PET 30 µm NASBIS* Adhesive 6 µm PGS 25 µm Adhesive 10 µm | |
| Heatproof temperature | | 100 °C | 100 °C | |
| 100 μm* | Part No. | EYGN0912QB6P | EYGN0912QD6P | |
| | Thickness (µm) | 216 | 171 | |
| 500 μm* | Part No. | EYGN0912QB4P | EYGN0912QD4P | |
| | Thickness (µm) | 616 | 571 | |
| 1000 µm* | Part No. | EYGN0912QB3P | EYGN0912QD3P | |
| | Thickness (µm) | 1116 | 1071 | |

^{*} Above listed Part No. are examples for evaluation and selection, not for mass production. Customized service available for mass production spec.

■ Minimum order 10 pcs.