

开发中 Development

隔热片 “BOY-P系列”  
Insulation Sheet "BOY-P Series"



资料提供: OzoneSave株式会社 Document provided by: Ozonesave Co., Ltd.

特点 Features

- ①使用含空气层的空心珠的隔热材料  
①Insulation material that uses hollow beads having air layer
- ②薄型、轻量隔热材料  
②Thin and lightweight insulation material
- ③重叠使用可提高隔热性能  
③Improved heat insulation performance when used by piling up multiple layers
- ④正在开发阻燃型及高耐热不可燃型产品  
④Flame-retardant type and high heat-resistant non-flammable type are under development

# 薄型 轻量 柔软 多层化

适用建材 保冷保温 医用等所有用途

Thin film type Light weight Flexible Multiple layers

For building material, cold insulation, medical use, etc.

产品规格 Product Specifications

No.	产品名称 Product Name	厚度mm参考 Approximate thickness mm	重量g/m <sup>2</sup> Weight g/m <sup>2</sup>	宽mm Width mm	长度 Length	导热率W/mk Thermal conductivity W/mk
1	“BOY-P” 普通型 "BOY-P" General type	0.14	56	1,000	卷状 Roll shape	0.067
2	“BOY-P” 阻燃型 "BOY-P" Flame retardant type	0.19	88	1,000	卷状 Roll shape	0.032
3	“BOY-P” 高耐热型 "BOY-P" High heat resistance type	开发中(耐热600℃以上, 不可燃认定材料) Under development (Heat resistant 600 °C or higher, non-combustible certified material)				

※导热率为本公司测量值, 并非保证值。

※These are our measured values and not guaranteed values.

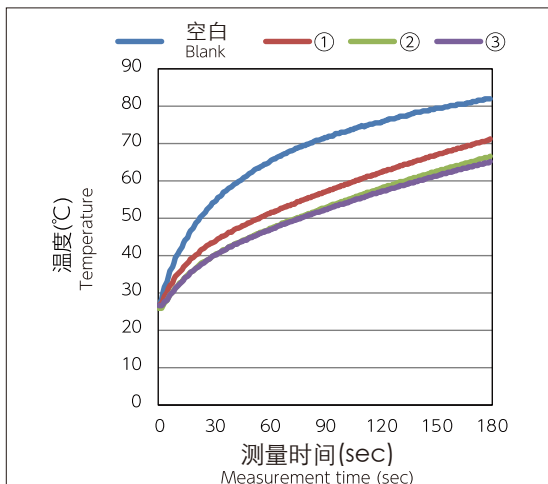
隔热性能 Insulation performance

※将e隔热材料放在作为热源的加热器上测量温度变化(①空白 ②1片e隔热材料 ③重叠2片 ④重叠3片)

※Insulation is placed on the heat source and change in temperature is measured.

((1) Blank (2) eInsulation 1 sheet (3) 2 sheets stacked (4) 3 sheets stacked)

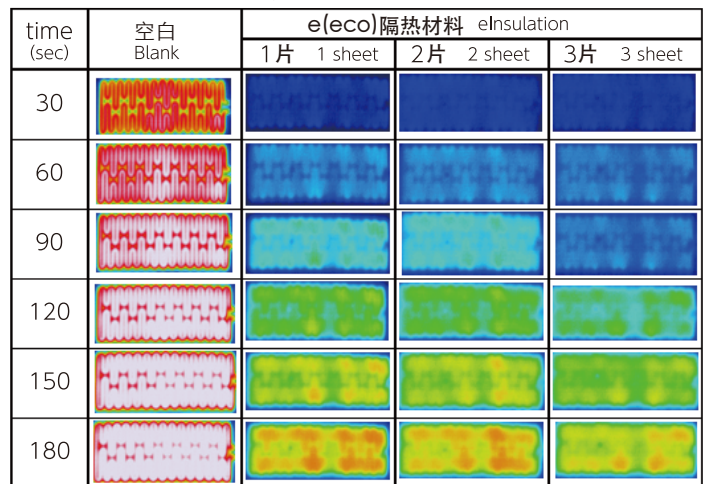
温度变化图表 Temperature change graph



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温度变化热成像 Temperature change thermogram



“卡博特非晶硅气凝胶颗粒”  
Aerogel particles made from amorphous silica, developed by Cabot

Micron to millimeter 'particles'

Nanoporous microstructure  
>90% air, 740m²/g surface

20nm open pores

Superhydrophobic

R = CH<sub>3</sub>

# 气凝胶 隔热材料

超轻量 超微细孔 空气率90%

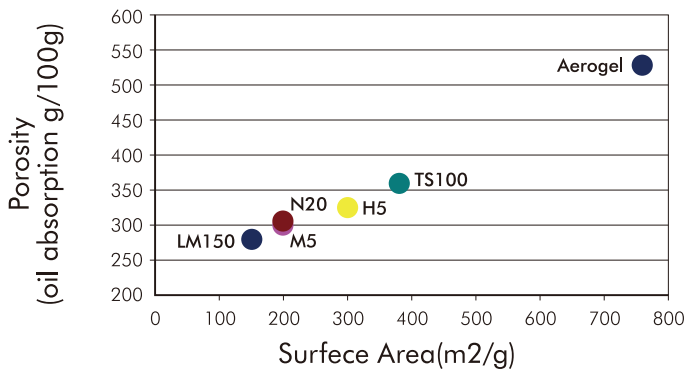
## Aerogel Heat Insulator

Ultra-lightweight Ultrafine pores  
Air occupies 90% of total particle-volume

### 特点 Features

- ①轻量、隔热、超低导热率0.012W/mk
  - ②高拒水性、蒸汽通气性
  - ③高透光性与分散性
  - ④惰性、长期稳定性、不可燃性
- 1.Lightweight, ultralow heat-conductivity (0.012W/mk)
  - 2.High water-repellent, vapor permeable
  - 3.High light transmission, dispersible
  - 4.Inert, nonflammable, long term stability commodo consequat.

气凝胶 vs 传统二氧化硅  
Aerogel vs conventional silica



卡博特气凝胶与传统二氧化硅相比拥有  
2-5倍的比表面积与1.5-3倍的孔隙率

Cabot aerogel has 2.5 times more specific surface area and is 1.5 to 3.0 times more porous than conventional silica.

资料提供: 卡博特日本株式会社 Materials provided by Cabot Japan Co., Ltd.

### 提供方案流程

- ①听取客户要求
- ②根据要求进行试制
- ③对试制品进行试验、评估
- ④提供给客户进行试制品评估
- ⑤以实用化为目标提供方案

### Ordering Procedure

1. First, tell us your requirements.
2. Then, we will design the product according to your specifications.
3. Next, we will create a prototype.
4. We will then evaluate the prototype to confirm that it satisfies your requirements.
5. Finally, we will propose the product to you for your order to us.

