



# Sumitomo Riko in response to CASE needs

▶ Japanese



## Connected (C)

Traffic control system, communications equipment develop



Suggestion

- ① Film decoration ornament

## Autonomous (A)

Driver state distinction, the living in the compartment



Suggestion

- ② Driver Monitoring System
- ③ Compartment Space Device

## Shared (S)

Use of unspecified, flying range increase

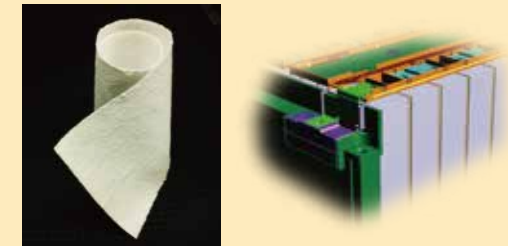


Suggestion

High reliability to be worthy of one flying range (existing business domain)

## Electric (E)

Substitution to parts to motorize, commoditizing



Suggestion

- ④ High Performance Heat Insulation 「Finesulight™」
- ⑤ Heat Insulation for Battery Cell

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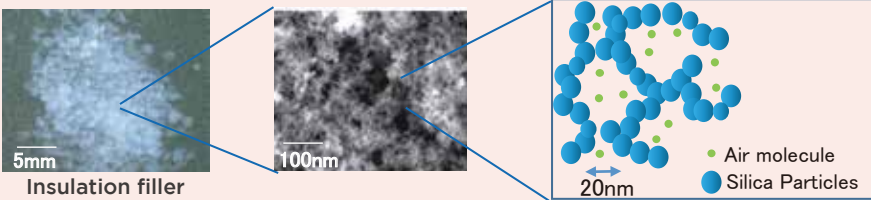
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# High Performance Heat Insulation 「Finesulight™」

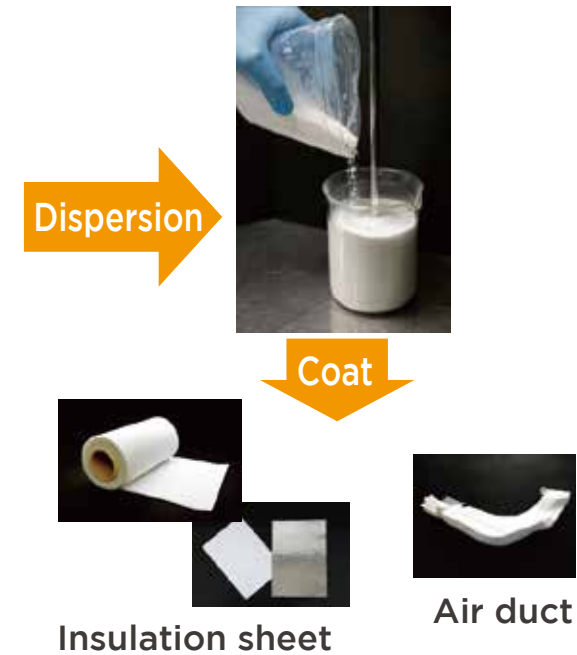


## Description

Sumitomo Riko have developed a high performance heat insulation that is very thin and flexible. By applying to interior items, this heat insulator can reduce heat transfer in and out of a vehicle, thus contributing to improving both fuel efficiency and comfortability.

	Heat Insulator
	Utilizing composition technology, form a paint coating with insulation filler
Structure	
Cavity Diameter	50nm (i/e prevent convective heat transfer )
Heat conductivity	<p><b>0.020W/mK (Paint film)</b></p> <p>Lower heat conductivity than air</p>

Can be applied in limited space



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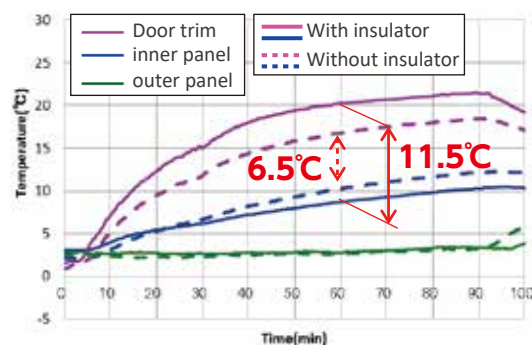
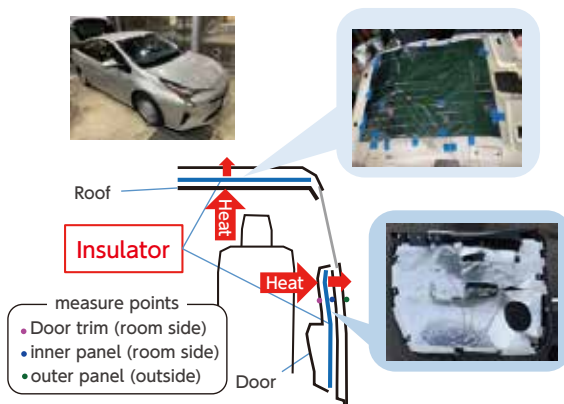
# High Performance Heat Insulation 「Finesulight™」



## Characteristics

### Heat insulation vehicle test

Measured temperature change with and without insulation.  
(Condition: outside temperature 0°C/heater usage)



Don't let heat escape to outside

### Simulation result

3.6% Reduction of heater work load

10.0% Reduction of heat loss from roof, door, and windshield.

2% improvement of electricity efficiency

## Application



- ① Roof liner
- ② Door panel
- ③ Seat heater
- ④ Air duct

- Interior parts ,air conditioning parts and battery parts for automobiles
- Home appliances, Electronic components
- Cool box, Insulation box
- Residential use

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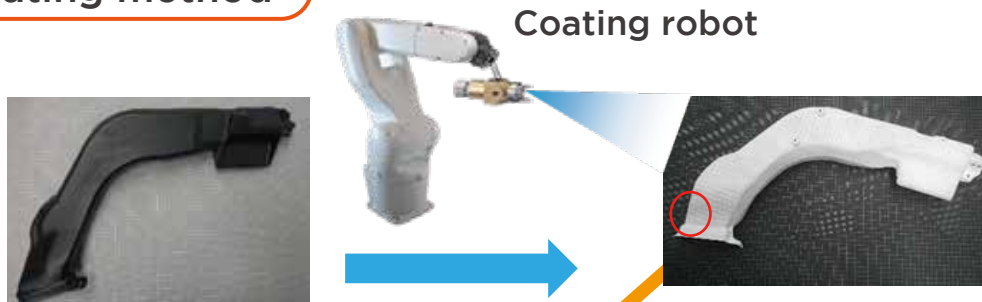
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# High Performance Heat Insulation 「Finesulight™」

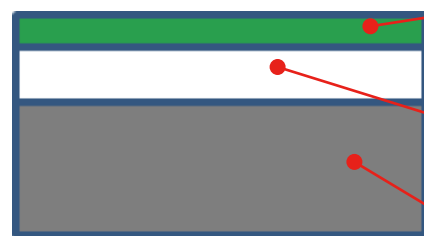


## Characteristics

Spray coating method

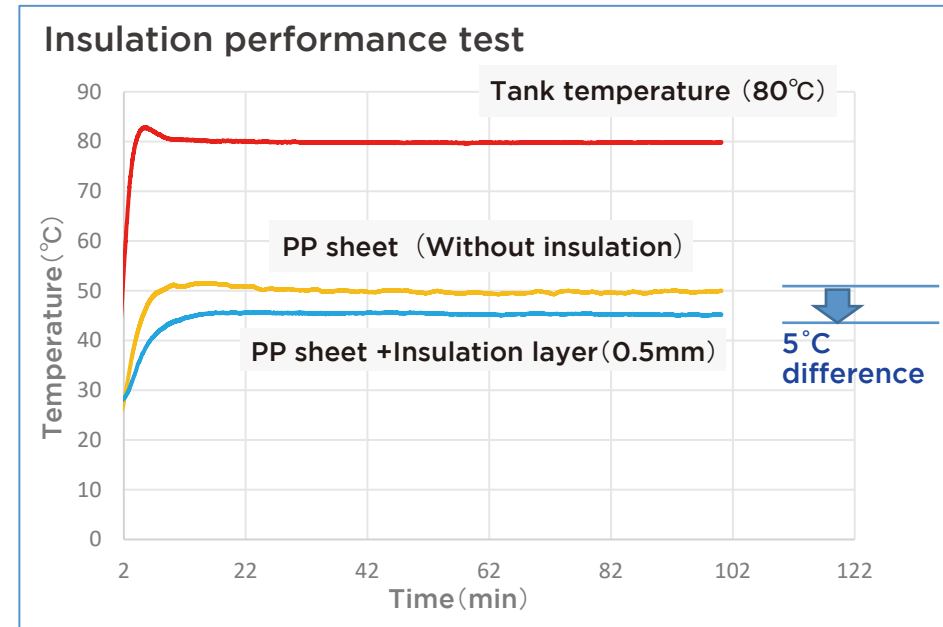


Sectional view



- Top coat layer**  
Role: Insulation layer protection  
Thickness: 60Qm
- Insulation layer**  
Insulation filler coating  
Thickness : 0.5mm
- Base material (PP)**  
※Other materials are possible

Can be coated in complex shapes



Insulation effect when heated to 80 °C  
Insulation coating layer (0.5mm) has the effect of reducing 5 °C.

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