



# FIRE BRAKER BALL

**Fire**



OFF

**Safety**

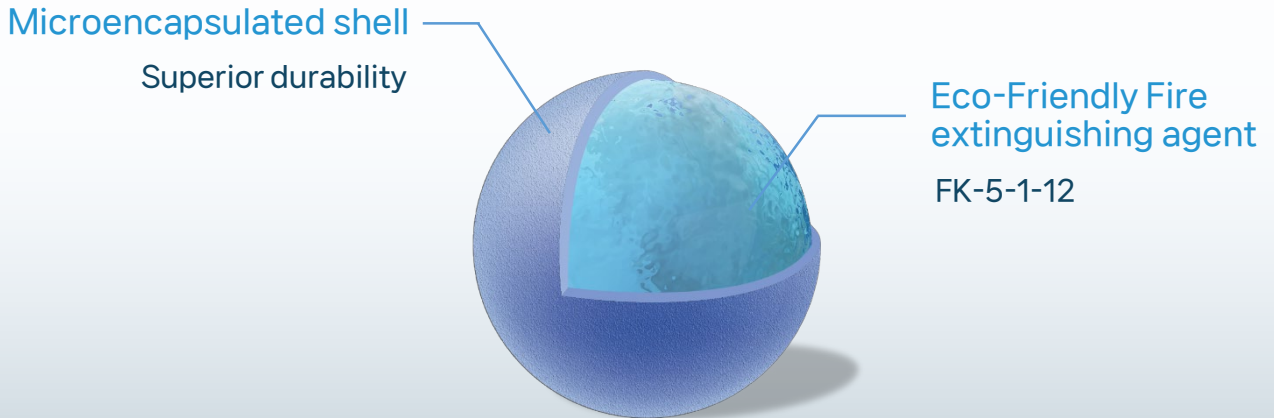
ON



Product description

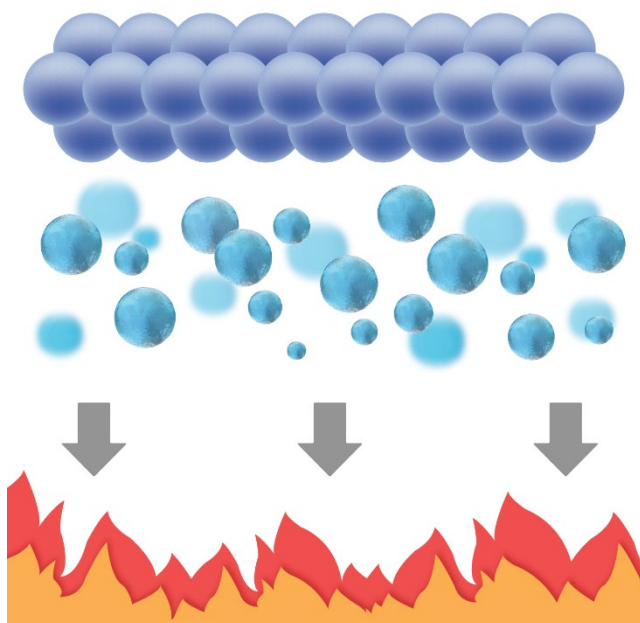
## What it is and How it works?

There is a fire extinguishing agent inside a microcapsulated structure which is particulated in range  $200\mu\text{m}\sim 250\mu\text{m}$ . In case of fire, It is capable of recognizing extreme high temperatures. As the microcapsule is broken, the fire extinguishing agent is promptly sprayed out. How useful this product is at the first phase of fire suppression!



### ▪ How it works?

In case of fire, As the microcapsule is broken by high temperature, the fire extinguishing agent is promptly sprayed out to suppress fire.



#### PROCESS

Rising ambient temperature by fire



Spraying out a fire extinguishing agent



Effective fire suppression at the initial phase

## What is the advantage of Fire extinguishing Microcapsule?

Creative suppressor for fire prevention

When the ambient temperature rises by fire,  
As the microcapsule is broken by high temperature,  
the fire extinguishing agent is instantly sprayed out to break the conflagration.

### Eco-friendly Products

Eco-Friendly fire extinguishing agent with high permittivity an insulation level.

### Automatic Fire Extinguishing System

Without additional equipments or devices, the fire will be suppressed, when it reaches to a certain temperature.

### Wide Applicability

By encapsulating a fire extinguishing agent, Applicable in various fire suppression products.

### High Stability

In order not to leak a fire extinguishing agent out below 100°C, Protecting it by encapsulating.

## 03 Application area

### Application area

Applicable for fuel cell, energy facility, building materials, textiles, as well as electrical room and panel board which might be involved with the fire risk.



Panel Board/  
Electrical room



Battery/ESS



Building materials



Textile

### Applied product

Application area has been expanding to Pad, Rope, Tape and other applied products for closed and hazardous spaces.



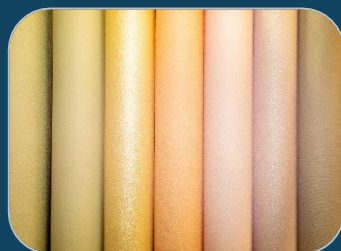
Fire suppression  
Sticker/Pad



Fire suppression  
Rope/Wire



Fire suppression Tape



Fire suppression  
Wallpaper



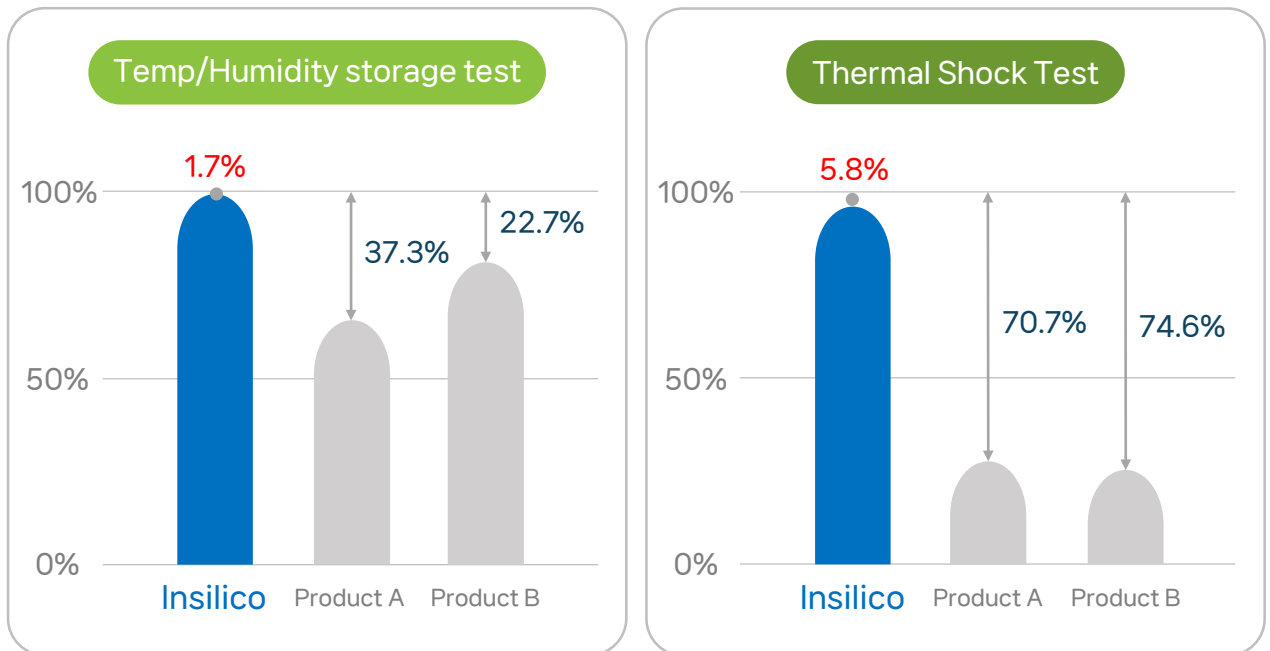
Fire suppression Paint



Firefighting clothes

## The Most Powerful & Durable Fire Braker Ball

In the durability test, the excellent shelf stability and persistency have been demonstrated.



- Temp/Humidity storage test method : Measure the weight loss rate after 24 hours of storage of Fire extinguishing Microcapsules in a constant temperature and humidity device at 80°C and 80% humidity.
- Thermal Shock Test : Measure the weight loss rate after repeating the process of putting the Fire extinguishing Microcapsules in a glass test tube and immersing it in a high-temperature (82°C) bath for 6 minutes and immersing it in a low-temperature (20°C) bath for 8 minutes, 300 times.

**Fire Braker Ball**  
with **the lowest weight loss**  
in all of the durability tests



Insilico is a world-leading company with unrivaled technology based on over 20 years of capsule manufacturing know-how.

## Professional

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We have know-how in manufacturing various functional capsules and design, development, production, and quality of materials.

## Highly Qualified

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Our AI consulting experience specializing in materials smart factory solutions enable us to maintain stable manufacturing and quality control.



## Customized

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Provide customized capsule making service based on material property data mining technology (modify capsule breakdown temperature, size, durability, etc.).

## Global Network

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We have a global network of more than 70 partners around the world to expand our connections.

## Material Research Center

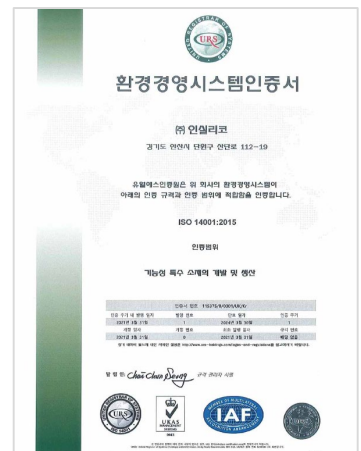
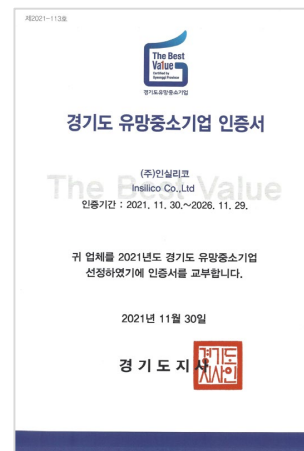
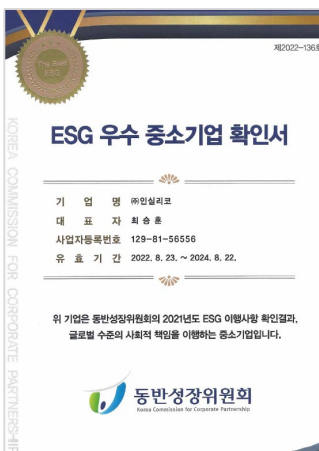
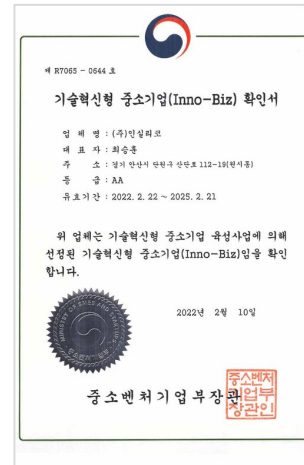
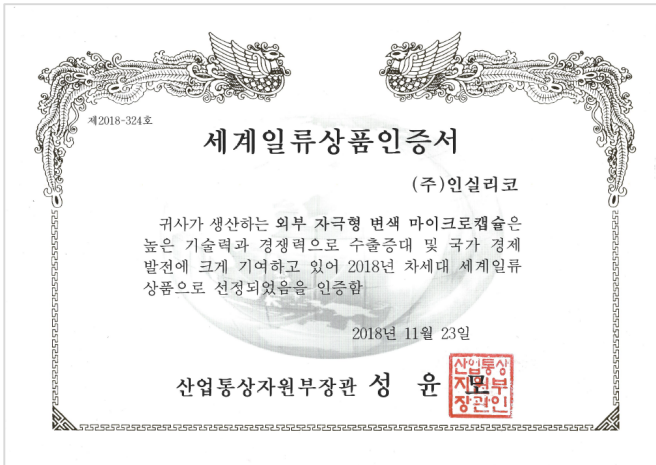
Based on the technology and excellent quality built up through continuous investment and research, we are uniquely positioned in the domestic and overseas functional Micro-capsule market.



## Manufacturing Plant

Digitizing and managing manufacturing processes with smart factory solutions, we export to overseas markets around the world, including China, the United States, India, the United Kingdom, Germany, France, Turkey, Vietnam, Russia, and Brazil.

We are constantly innovating to stay ahead of the curve. Based on our unique know-how, we will continue to innovate and lead the trend of the industry.



**Fire**  OFF

**Safety**  ON

Fire Braker Ball is a smart fire extinguisher  
that can suppress fires in its early stages.

Fire Braker Ball makes fire-safe environment.



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