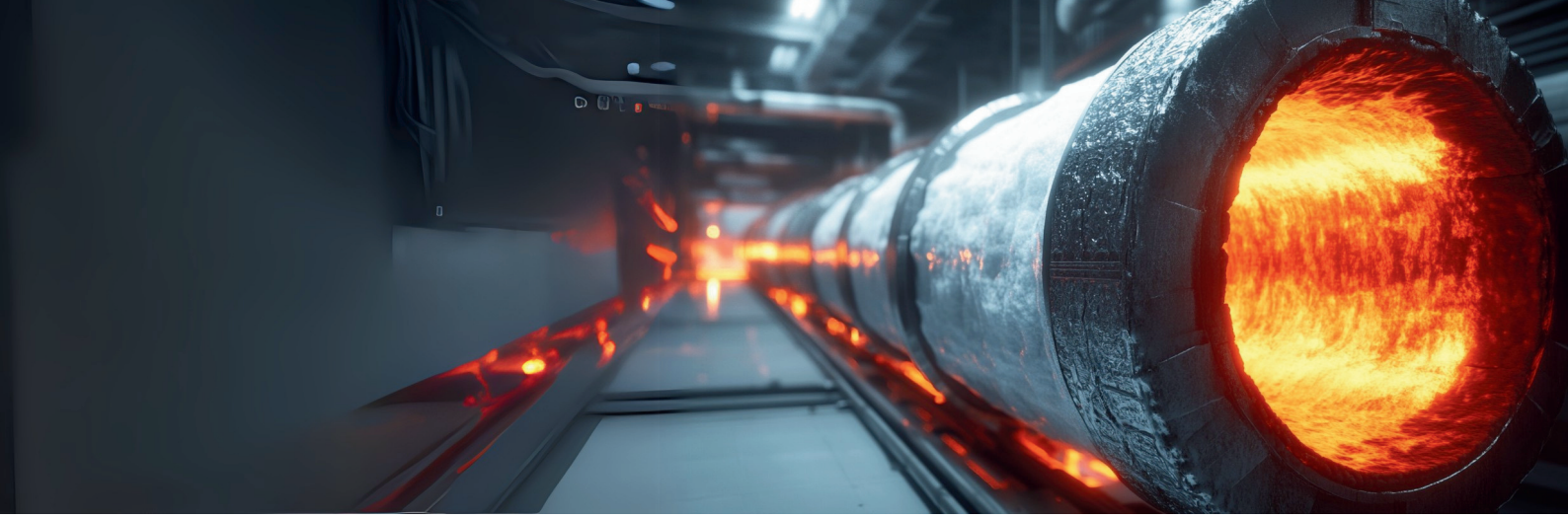
aerohik

more is always aerohik

E-Mail
info@aerohik.ch

Phone
+41 61 557 07 07

Website
www.aerohik.ch



aerohik

PRODUCT DATA SHEET

Aerohik's product line offers high-performance aerogel-based thermal insulation.
Our solutions are differentiated by **temperature resistance**, **thermal conductivity**, and **application area**, and they are optimally tailored to different project requirements.

01 Thermhik HT (High Temperature)

Thermhik HT is specifically designed for continuous operating temperatures from -40°C to +650°C.
It offers outstanding thermal performance and is ideal for high-temperature applications.

02 Thermhik CT (Cryogenic Temperature)

Thermhik CT is specifically designed for applications with extremely low temperatures, ranging from -200°C to +150°C.

03 Renewhik

Maximum performance for applications with particularly low thermal conductivity

04 Pulverhik

Aerogel in powder form – ideal for additives and mixing applications

05 Aerohik CS (Custom Solutions)

Thermhik Custom Solutions provides tailored solutions for applications requiring temperatures exceeding 650°C and up to 1240°C.

Each product is optimized for specific applications and technical requirements.
More performance. More efficiency. **More is always Aerohik**

THERMHIK HT

(HIGH-TEMPERATURE APPLICATIONS – RELIABLE INSULATION UP TO 650°C)

Thermhik HT was developed for continuous use in the temperature range from **-40°C to +650°C**. It is a high-performance aerogel-based thermal insulation mat. For short periods, the material can also withstand mechanical stresses up to **+1100°C**. Thanks to its low thermal conductivity, it offers excellent insulation properties in high-temperature applications.

TECHNICAL FEATURES

Continuous Operation	-40 °C to +650 °C
Short-Term Mechanical Load	+1100°C
Thermal Conductivity (λ)	0.019 W/mK
Density	0.15-0.25 g/cm³
Porosity	90-95%
Color	Aerohik-Blue
Vapor Permeability	5-5.5 μ
Superhydrophobic Structure	Protection against water and moisture
Fire Protection Class	A2-s1-d0
Coating Thickness	Approx. 40 micrometers (Anti-Dust SHP coating)
Compressive Strength	80 kPa at 10% Deformation
Environmental Impacts	5.4 kg CO_2 per m² at 1 cm thickness
Heat Capacity	1000 J/kg/K
pH	8
Flexibility	High Elasticity, Easily Adapts to Different Surfaces
Product Dimensions	6 mm, 10 mm, 12 mm, 24 mm, 36 mm, 40 mm.
Packaging	As Sheets (100 x 120 cm) or in Roll Form, Packed in Cardboard
Pallet Dimensions	1200 mm x 1000 mm.

Instuctions For Use

*Like other insulation materials, **Thermik HT** can be fixed with adhesive or dowels and is compatible with plaster systems.*

Typical Areas of Application

- *Petrochemical plants*
- *Industrial furnaces and pipelines*
- *Power plants*
- *Boilers and chimneys*
- *Construction and renovation projects*

THERMHIK CT

(CRYOGENIC TEMPERATURES – FOR EXTREME COLD APPLICATIONS)

Thermhik CT was specifically developed for applications requiring extreme temperature ranges from **-200°C to +150°C.** With an impressively low thermal conductivity of **0.019 W/mK**, it guarantees excellent thermal insulation at cryogenic temperatures.

Thanks to its **superhydrophobic properties**, the material remains water and moisture repellent, providing reliable performance even in demanding environments.

Continuous Operation	-200°C to +150°C
Thermal Conductivity (λ)	0.019 W/mK
Density	0.15-0.25 g/cm³
Porosity	90-95%
Color	Light Cream Colored
Vapor Permeability	5-5.5 μ
Compressive Strength	80 kPa at 10% Deformation
Environmental Impacts	5.4 kg CO_2 per m² at 1 cm thickness
Heat Capacity	1000 J/kg/K
pH	8
Flexibility	High Elasticity, Easily Adapts to Different Surfaces
Product Dimensions	6 mm, 10 mm, 12 mm, 24 mm,
Packaging	As Sheets (100 x 120 cm) or in Roll Form, Packed in Cardboard
Pallet Dimensions	1200 mm x 1000 mm.

RENEWHIK

(HIGH-TEMPERATURE APPLICATIONS – RELIABLE INSULATION UP TO 650°C)

Renewhik is specifically designed for demanding applications and offers reliable performance over a temperature range of **-40°C to +650°C**, with short-term mechanical resistance up to **+1100°C.**

With an exceptionally low thermal conductivity of only **0.017 W/mK**, **Renewhik** sets new standards in thermal insulation. Its superhydrophobic properties ensure outstanding resistance to water, moisture, and vapor, effectively preventing material deformation, structural collapse, and mold growth.

The non-flammable classification **(A2-s1, d0)** also ensures maximum safety and reliability in extreme environments. **Renewhik** is the ideal solution for applications requiring maximum thermal insulation and durability under the hardest conditions.

TECHNICAL FEATURES

Continuous Operation	-40 °C to +650 °C	Color	Aerohik-Blue
Heat Capacity	+1100°C	Flexibility	High Elasticity, Easily Adapts to Different Surfaces
Thermal Conductivity (λ)	0.017 W/mK	Compressive Strength	80 kPa at 10% Deformation
Density	0.15-0.25 g/cm³	Coating Thickness	Approx. 40 micrometers (Anti-Dust SHP coating)
Porosity	90–95 %	Environmental Impact	5.4 kg CO_2 per m² 1cm Thickness
pH	8	Heat Capacity	1000 J/kg/K
Vapor Permeability	5–5.5 μ	Product Dimensions	6 mm, 10 mm, 12 mm, 24 mm, 36 mm, 40 mm
Superhydrophobic Structure	Protection Against Water and Moisture	Packaging	As Sheets (100 x 120 cm) or in Roll Form, Packed in Cardboard
Fire Protection Class	A2-s1, d0 (non-flammable)	Pallet Dimensions	1200 mm x 1000 mm

Instuctions For Use

*Like other insulation materials, **Renewhik** can be fixed with adhesive or dowels and is compatible with plaster systems.*

Typical Areas of Application

- *Petrochemical plants*
- *Industrial furnaces and pipelines*
- *Power plants*
- *Boilers and chimneys*
- *Construction and renovation projects*

PULVERHIK

(PULVERHIK IS A HIGHLY INSULATING, HYDROPHOBIC SILICATE IN POWDER FORM)

Pulverhik is a next-generation silicate-based aerogel in powder form. It is highly insulating and hydrophobic with high purity and high translucency. At the same time, it is extremely lightweight.

Product Highlights

- *High-purity silica aerogel*
- *Lowest thermal conductivity*
- *Lightweight with low density*
- *Robust and slightly elastic*
- *High hydrophobicity without silane chemistry*
- *High translucency*

Continuous Operation	-40 °C to +650 °C
Thermal Conductivity (λ)	0.014-0.016 W/mK
Specific Surface Area	600-800 m2/g
Porosity	90-95%
Short-Term Mechanical Stress	Not Applicable
Particle Size Distribution	1 - 20 µm
Density	0.08 -0.12 g/cm3
Mold Resistance	Very High
Surface Contact Angle	> 165 degrees
pH	8
Ecological Impacts	4.32kg CO2 for kg
Environmental Impacts	5.4 kg CO_2 per m^2 at 1 cm thickness
Heat Capacity	1000 J/kg/K
Dielectric Constant	k<2
Superhydrophobic	Yes

AEROHIK CUSTOM SOLUTIONS

(SPECIAL SOLUTIONS)

01

High-Temperature Solutions for Demanding Applications

Aerohik Custom Solutions develops customized high-temperature solutions for extreme conditions requiring temperatures from over **650°C** up to **1240°C**. Our products are based on state-of-the-art aerogel technology and guarantee **maximum efficiency** in the most demanding applications.

02

Innovative Materials and Outstanding Properties

Our superhydrophobic mats, made from HR glass fiber and ceramic fibers, offer an extremely low thermal conductivity of only **λ = 0.019 W/mK**. These materials meet the highest fire protection class **A2-s1, d0**, ensuring maximum safety and efficiency in any environment.

03

Customization and Durability

With customizable moisture barriers and special coatings, we optimally adapt our solutions to our customers' specific requirements. Our products are characterized by their **durability, water resistance**, and **reliability** – even under **extreme conditions.**

PRODUCTS

OUTSTANDING PROPERTIES AND BENEFITS

Aerogel is used in all areas of life and industry.

HIGH-PERFORMANCE INSULATION
MAXIMUM INSULATION PERFORMANCE WITH MINIMAL THICKNESS, ENHANCED ENERGY EFFICIENCY.

OUTSTANDING THERMAL INSULATION
THERMAL CONDUCTIVITY OF 0.021 W/MK ENSURES MINIMAL ENERGY LOSS.

WIDE TEMPERATURE RANGE
OPTIMIZED OPTIONS FOR DIFFERENT TEMPERATURE REQUIREMENTS.

FLEXIBLE AND LIGHTWEIGHT STRUCTURE
SAVES SPACE AND FACILITATES INSTALLATION IN TIGHT AREAS.

DURABILITY
SUPERHYDROPHOBIC STRUCTURE, WATER- AND MOISTURE-PROOF, FOR LONG-LASTING PERFORMANCE.

FIRE PROTECTION
HIGH FIRE RESISTANCE WITH A2-S1, D0 FIRE PROTECTION CLASS.

ENVIRONMENTALLY FRIENDLY AND COST-EFFICIENT
REDUCES ENERGY COSTS AND IS BOTH ENVIRONMENTALLY AND BUDGET-FRIENDLY.

CUSTOMIZABLE OPTIONS
CUSTOMIZABLE DESIGNS AND MATERIAL COMBINATIONS FOR SPECIFIC PROJECTS.

PRODUCTS

AREAS OF APPLICATION

1 Energy Sector

Aerogels are used in the energy sector as high-performance insulating materials to minimize heat losses in pipelines, storage facilities, and turbines, thereby enhancing energy efficiency.

2 Pharma & Chemical Industry

In the pharmaceutical and chemical industries, aerogels are used as carrier materials for active ingredients, catalysts, or adsorbents to optimize chemical processes and enable the storage of sensitive substances.

3 Construction, Building Services, Interior Design

In construction, aerogels are used for building insulation as they provide excellent thermal insulation with minimal thickness while reducing energy consumption.

4 Industry, Engineering

In industry, aerogels are used in high-temperature processes, such as insulating industrial furnaces or reducing energy losses in technical systems.