

ENRICHES YOUR PRODUCT.

The brilliant lightweight additive, made in Germany.



# VOLITE® – MAXIMUM PERFORMANCE FOR UNLIMITED OPPORTUNITIES.

VOLITE® is the mineral-based lightweight additive that not only lends products like fillers and tile adhesives more volume, but actually enhances their quality.

## **MORE VOLUME**

Creating more volume is the least you can expect from an additive. So of course you know that VOLITE® will make the most of your product.

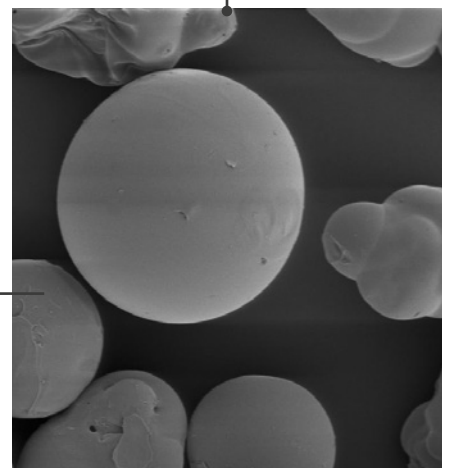
## **LOWER COSTS**

VOLITE® is already much lower in price than other lightweight aggregates. That minimises your production costs, allowing you to increase your profit margin or market your product for less.

## **BETTER QUALITY**

VOLITE® gives the product uniform consistency and optimised viscosity for ideal workability and easier sanding, resulting in superior finishes. And with VOLITE®, you can vary the degree of hydrophobation case-by-case – to meet the requirements of the respective application.

**VOLITE® – the mineral-based lightweight additive.**



VOLITE® – the lightweight aggregate of mineral origin.





## PERLITE – ROCK FROM THE VOLCANO.

VOLITE® is based on perlite, a glass-like stone that originates in volcanic lava. Thanks to our ownership participation in mining activities on the Greek island of Milos – the best-known extraction site in Europe – we have access to extremely high-quality raw perlite. Perlite is characterised by its high water of crystallisation content of 2 to 5 percent, which makes it extremely expandable.

In a special refining process known as the 'popcorn principle', the raw mineral is transformed into our base product. The crushed rock is briefly heated to 1,000°C. The water contained in the crystal vaporises, causing the perlite to enlarge up to 20 times its volume. The result is an open-pore, extremely light granulate – the base material of all perlite products. And depending on the further refinement, the highly specialised end product for a range of industries and requirements.

### **SHORT TRANSPORT ROUTES – LONG-TERM ADVANTAGES**

While comparable products often come from the USA, we have the advantage of procuring our raw materials right here in Europe, from Greece. The raw perlite needed to make VOLITE® thus has only a short distance to travel before being processed in Germany. This saves delivery time, ensures a reliable and secure supply, and ultimately even enables a lower price.



# THE LIGHT ADDITIVE THAT BOOSTS PERFORMANCE.

VOLITE® enhances the quality of your end product in many respects. And you can even vary the degree of hydrophobation of this lightweight aggregate individually depending on the requirements of the respective application. With all its benefits, you could certainly say that VOLITE® is the clear winner.



## WELL ROUNDED: PROPERTIES OF VOLITE®

- › Exceptionally round
- › Exceptionally light
- › Exceptionally small
- › High degree of whiteness
- › Natural and mineral
- › Low water absorption
- › Hydrophobation individually variable
- › Non-flammable
- › Frost-resistant



**LONG  
POT LIFE**

- › The single-celled, closed-pore grains in VOLITE® ensure low water absorption, thus extending the open time. This makes it ideal for use over large areas in a single working step without any visible edges. With pot lives optimised by VOLITE®, the professional user can save time and boost productivity. And optional hydrophobation minimises later thickening of your products.



**HIGH  
YIELD**

- › VOLITE® is comprised of hollow spherical grains and is therefore extremely light – lighter than glass grains and significantly lighter than silica sand. The result is a lighter end product with a higher yield.



**PERFECT  
FINISHES**

- › VOLITE® also enhances the surface finishing characteristics of end products. They are easier to sand, making it possible to achieve surface qualities up to Q4 – with less effort. These surfaces also take paint particularly well and more easily.



**EASIER  
SANDING**

- › With VOLITE®, the finished surface is easier to sand. This reduces the amount of work and the dust produced.



**IMPROVED  
VISCOSITY**

- › Another benefit of the perfectly round and closed-pore grains in VOLITE® is better viscosity.

Easy workability thanks to favourable viscosity and excellent sanding properties.



**BETTER  
REPUTATION**

- › VOLITE® enhances the quality and improves the workability of your end product. Processors value a brand with these characteristics – a boon to your reputation.



# THE PREMIUM LIGHTWEIGHT AGGREGATE.

VOLITE® enhances the quality and improves the workability of your end product in many fields of application.



There are a range of ways to use VOLITE®, but the advantages of this extremely versatile lightweight aggregate are particularly suited to enhancing the quality of end products for the construction industry:

- › Lightweight fillers (cementitious or polymer-bound)
- › Tile adhesive
- › Insulating plasters
- › Levelling compounds



For perfect surface qualities up to Q4.

## DESIGNED SPECIFICALLY FOR THE CONSTRUCTION INDUSTRY

Quality made in Germany - that's what you'll find in every application we offer. As an experienced manufacturer of building materials, we at KNAUF AQUAPANEL deal daily with plasters, mortars and fillers. So we know exactly what our customers expect from their end products such as base and finishing plasters.

That's why we developed VOLITE® as an innovative solution for lightweight products that are quick and easy to apply. VOLITE® is an individually controllable lightweight aggregate that can adapt to any desired material property. And thanks to its variable hydrophobation, perfect surfaces can be achieved every time, no matter the application.

## GENERAL INFORMATION FOR THE INDUSTRY

In the course of long-standing partnerships, we collaborate with our industrial customers to continually develop new products and future-ready solutions. We are able to draw on our own experience and expertise in almost all areas.

In the case of VOLITE®, we even have our own source of raw material, ensuring both short-term availability and long-term security of supply. And much more: namely consistent material properties thanks to continuous quality monitoring, maximum yield for high added value and ecologically sound logistics for a product that is totally free of plastics.





**Try out  
VOLITE®**  
Get in touch with us!





## VOLITE® DELIVERS FOR CUSTOMERS.

VOLITE® enables specialised brands in the construction chemicals business to offer lighter containers which nevertheless offer greater surface coverage. With VOLITE®, tradespeople minimise costs, working time and effort. See the advantages for yourself through the following three examples.





### LOWER WEIGHT, GREATER COVERAGE

A plasterer has been commissioned to plaster multiple walls on the fourth floor of an apartment building. Until now, with his usual equipment he would have had to carry a 25-kg bucket full of filler up to the flat – for each 8.3 m<sup>2</sup> of surface area.

Now he has tried a lightweight filler enriched with VOLITE®. In this case, a 15-kg container suffices for a coverage of 9.4 m<sup>2</sup>. The tradesman saves an impressive 10 kg of weight per container for increased coverage in both relative and absolute terms.

### MAXIMUM SUPPLY RELIABILITY

A manufacturer of dry mortar receives a re-order of a product just a few weeks after a large order. To fulfil the order, the manufacturer needs VOLITE®, as it uses the aggregate in its product – and it needs it fast.

No sweat! Thanks to having our own source of raw material, the manufacturer can rely on short-term availability and long-term security of supply. Not to mention consistent raw material quality with end-to-end quality assurance. The product can be produced in good time and with identical quality to the previous batch.

### MORE JOBS IN THE SAME AMOUNT OF TIME

A painting company is trying out fillers and plasters from a new manufacturer that enriches its products with VOLITE®.

The uniform roundness of the grains enhances the products' workability while VOLITE® ensures a smoother surface finish that is particularly easy and fast to paint. That saves time. This, in turn, enables the painter to take on more jobs than previously in the same amount of time.



# THE MANY FORMS OF PERFECTION.

VOLITE® varies in size and bulk density, is available in many delivery forms and its degree of hydrophobation can be adjusted as needed. Always perfectly adapted to the respective requirements.

## PRODUCT VARIANTS

Production	Size	Bulk density	Hydrophobic
<b>VOLITE® 200</b>	0-200 µm	140 g/l	no
<b>VOLITE® 200h</b>	0-200 µm	140 g/l	yes
<b>VOLITE® 200 SD 110</b>	0-200 µm	110 g/l	no
<b>VOLITE® 200 SD 110h</b>	0-200 µm	110 g/l	yes
<b>VOLITE® 500</b>	0-500 µm	150 g/l	no
<b>VOLITE® 500h</b>	0-500 µm	150 g/l	yes
<b>VOLITE® 500F</b>	0-500 µm	90 g/l	no
<b>VOLITE® 500Fh</b>	0-500 µm	90 g/l	yes

## TECHNICAL DATA

<b>pH-value at delivery (20 °C)</b>	6-8.5
<b>Melting point (°C)</b>	approx. 1,400
<b>Density (g/cm³)</b>	2.3
<b>Bulk density (g/l)</b>	90-150
<b>Size (µm)</b>	0-200 (VOLITE® 200/200h/ 200 SD 110/ 200 SD 110h)
<b>Size (µm)</b>	0-500 (VOLITE® 500/500h/ 500F/500Fh)
<b>Temperature resistance (°C)</b>	up to 800







## THE MANUFACTURER FOR SPECIAL SOLUTIONS.

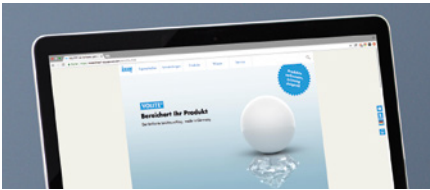
Architecture is an expression of its time. This means that not only the forms are constantly changing, but also the construction methods and building materials. We at KNAUF AQUAPANEL have therefore set our sights on helping to shape the future of building. As a leading manufacturer of innovative construction products and pioneering technologies, we particularly specialise in insulating materials made of perlite and drywall systems. We are constantly developing new solutions for plasters and fillers that are leaders in terms of both technology and economy – just contact us to find out more.

### **BENEFIT FROM OUR EXPERTISE**

- › Three production facilities:  
Dortmund, Bülstringen, Neuburg  
a. d. Donau, Germany
- › Short delivery routes and times
- › Low transport costs
- › Guaranteed availability
- › Promise of high quality



# TAKE ADVANTAGE OF THE VALUABLE SERVICES FROM KNAUF.



## WEBSITE

Find information, download data sheets and brochures or make an appointment – all in just a few clicks on our website.

> [www.volite.de](http://www.volite.de)



## PERSONAL CONSULTATION

Arrange a personal consultation to test VOLITE® for your research and development.

> [matheus.kuchnia@knauf.com](mailto:matheus.kuchnia@knauf.com)  
> Tel. +49 (0)231/9980-01



## YOUTUBE

Visit our YouTube channel and see the impressive qualities of VOLITE® for yourself.

> [www.youtube.com](http://www.youtube.com)

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Ceiling systems

**Knauf Bauprodukte**  
Professional solutions for the home

**Knauf Design**  
Surface expertise

**Knauf Gips**  
Drywall construction systems  
Soil systems  
Plaster and facade systems

**Knauf Insulation**  
Insulation systems for renovation and new construction

**Knauf Integral**  
Gypsum fiber technology for floors, walls, and ceilings

**Knauf PFT**  
Machine technology and systems engineering

**Marbos**  
Mortar systems for pavements in underground construction

**Sakret Baustysteme**  
Dry mortar for new construction and renovation