

pure. proven. perfect.



Product catalog

AlzChem Performance nutrition

 **Creapure**[®]

 **Alipure**[®]

 **Crenipure**[®]

An aerial photograph of a valley. In the foreground, there is a residential area with red-roofed houses. Above it is a large industrial or commercial park with several large white buildings and parking lots. The surrounding landscape is lush green with fields and forests. In the distance, there are rolling hills and mountains under a clear sky. A large body of water is visible on the left side of the image.

Quality – the result of experience



At AlzChem, an international chemical company with more than a century of experience, we have positioned ourselves in the world of specialty chemistry with both well-established and new products for global markets. Our company is located in Trostberg in Bavaria, Germany.

Many AlzChem products are based on carbide, which is obtained from coal and lime. The production of creatine, a performance-enhancing supplement that became an integral part of the sports nutrition world following the 1992 Olympics in Barcelona, is also based on this synthesis.

More than 20 years ago, Creapure® was introduced, the first product of the new AlzChem Performance nutrition division. Today AlzChem Performance nutrition includes three product groups – the umbrella brands Creapure®, Alipure®, and Crenipure®, which are used as raw materials in supplements and foods, pharmaceutical products, and cosmetics.

Our top priority is to ensure the highest product quality. That's why more than 15 years ago, we commissioned a modern production facility in Trostberg that is specifically designed to produce creatine and alpha-lipoic acid according to the highest standards for foods and medicinal products. Our independent analytical department provides ongoing quality control and, like our laboratory in the area of research and process development, has gained extensive expertise related to creatine and alpha-lipoic acid.

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Products by AlzChem

Performance nutrition

All good supplements are characterized by four criteria:

- **Efficacy** (proven in peer-reviewed studies)
- **Availability** (in adequate concentrations at the site of action)
- **Safety** (few, if any, side effects, which can be only noncritical)
- **Purity** (optimum content, no contamination with critical substances)

Only supplements that fulfill these criteria are worth the price. That's why the AlzChem Performance nutrition portfolio is limited to products that occur naturally in the body and are shown to promote performance.

The AlzChem Performance nutrition division includes the following brands:

 **Creapure**[®]

 **Creapure**[®] *AH*

 **Creapure**[®]
Citrate

 **Creapure**[®]
pH 10

 **Creapure**[®]
Glucos

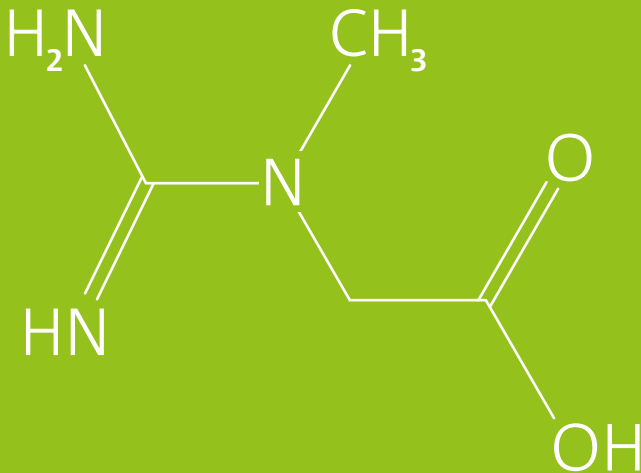


Alipure[®]

Crenipure[®]

Alipure[®] WS

Creapure® – creatine for promoting performance



Creatine

Creatine occurs naturally in the body. It plays a key role in transporting and storing energy in each cell. An adult's body contains about 80-130 grams of creatine. Approximately 1-2% of that amount is broken down and excreted, and must be replenished each day. Some of it can be synthesized by various organs. Another portion comes from food. Sufficient amounts of creatine are found only in meat and fish – not in vegetables or dairy products.

Studies have shown that when 3 grams are taken daily, creatine increases physical performance in successive bursts of short term high intensity exercise. A second approved health claim states that 3 g/d creatine in combination with resistance training can improve muscle strength in adults over age 55.

The purity of creatine is just as important to your body as its effectiveness. We developed a very safe method for generating an extremely pure product and built a separate production facility in Germany specifically for making creatine. We also manufacture the primary raw materials for creatine synthesis, which – along with regular internal and external quality controls, and ongoing precise analyses – ensures the best possible quality in each production batch.

Creatine monohydrate by AlzChem is distributed to well-known manufacturers of sports nutrition products all over the world under the Creapure® brand. Many of them display the Creapure® logo on their packaging to show that their products contain a top-quality ingredient from a traceable source in Germany.

For more information about Creapure®, visit: www.creapure.com

Creapure®

Creapure® is the premium brand for creatine worldwide.

Countless peer-reviewed studies testify to the efficacy and optimum safety profile of creatine monohydrate. This has been confirmed by EFSA and two health claims approved by the EU commission as well as many other international authorities and organisations. Creapure® is our dietary supplement grade creatine monohydrate and used mostly in supplements and functional food, but also in cosmetics and other technical applications.

- Ingredient: creatine monohydrate
- Mol. formula: $C_4H_9N_3O_2 \times H_2O$
- CAS number: 6020-87-7
- Packaging: cardboard box with inner PE-bag, 25 kg



Kosher

Halal

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Creapure® AH

Creapure® AH contains 100 % creatine.

Unlike creatine monohydrate (88 % creatine) and all other forms of creatine (far below 88 % creatine) this product consists of pure creatine and is free of water from crystallization or dilutive ions or molecules. Creapure® AH is used as a dietary supplement.

-  Ingredient: creatine anhydrous
-  Mol. formula: $C_4H_9N_3O_2$
-  CAS number: 57-00-1
-  Packaging: drum with inner PE bag, 20 kg



Creapure® *Citrate*

Creapure® Citrate is lemon flavored.

While Creapure® is tasteless, citrate adds a lemon taste to this product. Creapure® Citrate is used as a dietary supplement.



- Ingredient: creatine citrate
- Mol. formula: $3\text{C}_4\text{H}_9\text{N}_3\text{O}_2 \times \text{C}_6\text{H}_8\text{O}_7$
- CAS number: 440632-86-0
- Packaging: metallic drum with inner PE bag, 20 kg

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Creapure® *pH 10*

Creapure® pH 10 is buffered creatine.

When dissolved in water the resulting solution has an alkaline pH of approx. 10 due to the addition of the buffer mixture. Creapure® pH 10 is used as dietary supplement.



- Ingredients: creatine monohydrate, sodium carbonate, sodium bicarbonate
- Mol. formula: $\text{C}_4\text{H}_9\text{N}_3\text{O}_2 \times \text{H}_2\text{O}, \text{Na}_2\text{CO}_3, \text{NaHCO}_3$
- CAS number: 6020-87-7, 7542-12-3, 144-55-8
- Packaging: cardboard box with inner PE bag, 25 kg

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Creapure[®] *Gluc*

Creapure[®] Gluco is ideal for travel.

This product combines Creapure[®] with glucose, has a lemon or raspberry flavor and is compressed to chewing tablets. Each tablet contains 1 g Creapure[®] and can be ingested without water. Ideal intake of a defined amount of pleasant tasting creatine during travels or on the go.

- **Ingredients:** creatine monohydrate, dextrose monohydrate, citric acid, magnesium salts of fatty acids, coconut oil, natural flavor
- **Mol. formula:** $C_4H_9N_3O_2 \times H_2O$
- **CAS number:** 6020-87-7
- **Packaging:** cardboard box with inner PE bag, 20 kg





**Alipure® –
a powerful
antioxidant**

Alpha-lipoic acid

Many chemical processes in the body are possible only when enzymes are present. Sometimes coenzymes are needed in addition. Alpha-lipoic acid is such a co-enzyme and plays an important role in various biochemical processes.

Because of its chemical structure, alpha-lipoic acid also plays a key role as an antioxidant. Antioxidants are able to render free radicals harmless, which can cause major damage to cells and share some of the responsibility for aging processes.





It is important that antioxidants get to the place in the body where they deploy their impact. Alpha-lipoic acid can easily be converted to the reduced form dihydro-lipoic acid (and the reverse). The first form is lipo-soluble, while the second is water-soluble, which allows effectiveness in both watery and fatty environments. Due to the small molecule size it is able to pass the blood-brain barrier, so alpha-lipoic acid can also function in the brain. It can even penetrate a cell nucleus and directly protect genetic material. Another important task for alpha-lipoic acid is its ability to regenerate other antioxidants, such as vitamin C or glutathione.

We have developed a sophisticated method to produce the supplement Alipure®, which is alpha-lipoic acid absolutely free of solvents. A production facility that is ideally suited to this process has been built in Trostberg, and every production batch is subject to strict quality controls. Unlike the alpha-lipoic acid that occurs only as the R-enantiomer in the body, our chemical synthesis produces the racemate. However, the corresponding S-form has no adverse effects and can be included without hesitation.

Alipure®

Alipure® is a solvent-free alternative.

A special manufacturing process has been developed to produce alpha-lipoic acid with no organic solvent being detectable in the final product. This synthesis leads to the racemate, which is more stable and cost-effective compared to the isolated enantiomer. 2 % of an anticaking agent (SiO₂) are added to improve product properties. Alipure® has dietary supplement grade and its powerful antioxidant properties are mostly used in blends and functional food, but it is also used in cosmetics and other technical applications.

-  Ingredient: alpha-lipoic acid
-  Mol. formula: C₈H₁₄S₂O₂
-  CAS number: 1077-28-7
-  Packaging: plastic drum with inner PE bag, 5 kg



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Alipure® WS

Alipure® WS is free of anticaking agents.

We also offer alpha-lipoic acid without added anticaking agent. The product is solvent-free. Alipure® WS is mostly used in dietary supplements.

-  Ingredient: alpha-lipoic acid
-  Mol. formula: $C_8H_{14}S_2O_2$
-  CAS number: 1077-28-7
-  Packaging: plastic drum with inner PE bag, 5 kg

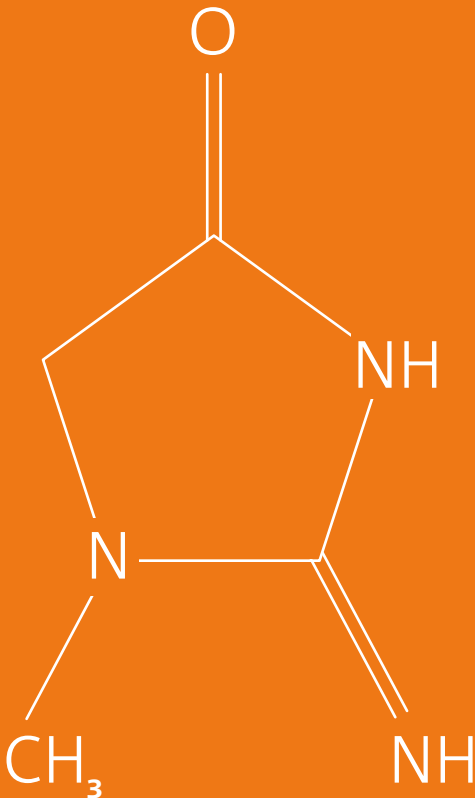


Kosher

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Crenipure® – in pharmaceutical applications



Creatinine

Creatinine is the natural end product of the creatine metabolism and does not have an effective function in the body. The body excretes creatinine almost constantly through the kidneys in urine. Consequently, medical practitioners use creatinine-concentration measurements in blood serum or urine as a parameter for checking kidney function. High creatinine values point to reduced kidney function. That's why creatinine is used in diagnostic kits to determine creatinine values.

Creatinine has mild skin-brightening properties, so it is used in cosmetics to balance skin tone and reduce age spots. We offer Creatinine under the brand name Crenipure®, which we produce in Trostberg, Germany, from our in-house generated raw material creatine.

Crenipure®

Crenipure® is made in Germany.

Crenipure® is used as starting material for Crenipure®. The product is mostly used in cosmetics.



- Ingredient: creatinine
- Mol. formula: $C_4H_7N_3O$
- CAS number: 60-27-5
- Packaging: pail containing 10 kg

Kosher

Halal





**Take advantage
of our experience**

Custom synthesis

Do you:

- Have an idea for a product?
- Lack the research capacities to develop it?
- Have a technically advanced synthesis method but lack the necessary plant capacity?

Let's create a dialogue to help research your idea and find the best way to collaborate. We always listen carefully to new concepts and promise to do our best to understand what you need, making it possible to achieve the best possible result. And, of course, we value confidentiality as the basis for successful cooperation.

We have years of experience manufacturing dietary supplements, so we can cooperate closely with you on production. Let's get together and see whether your product idea can be realized in our production facility. We'll prepare a cost-effective proposal just for you. With your great concept and our resources, we can both share in successfully launching your product.

**Need a partner?
We'd like to hear from you.**





**Our logos
as a seal of quality**

Trademark licensing

Our customers are not obligated to use our product brands when purchasing our products. The only requirement is to maintain compliance with patents and applicable regulations.

If you have an interest to promote your products using our brands, thereby showing your commitment to world-class ingredients, then please get in touch with us. You will understand that there are some additional criteria which apply and rules that must be followed in the interest of all consumers as well as for the protection of our brands.

Most importantly you need to:

- purchase our products in a traceable way
- sign a trademark license agreement with AlzChem
- have your product labels containing our brands approved by AlzChem

We reserve the right to offer a trademark license agreement only to those companies who we believe meet the necessary high standards. We will provide you with our quality seal containing your unique code. Please ask our sales team for further information on the process, the criteria which apply and the regulations on the usage of our brands – or simply send us an email to info@creapure.com.

**Want to use our quality seals?
Please contact us.**



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