

1, 2-Pentanediol CAS 5343-92-0 with Factory Price in Stock

Our Product Introduction

for more products please visit us on firskytech.com

Basic Information

- Place of Origin: China
- Brand Name: Firsky
- Model Number: FS-5343-92-0
- Minimum Order Quantity: 1KG
- Packaging Details: 1kg, 5kg, 15kg, 20kg, 25kg can be packed in different specifications. Packaging can be customized according to customer requirements. Aluminium foil bag and carton.
- Delivery Time: 7-15days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 2000T



Product Specification

- Product Name: 1, 2-Pentanediol
- CAS NO: 5343-92-0
- Purity: 99%
- Shelf Life: 2 Years



Product Description

Specifications:

Product Name:	1,2-Pentanediol
Synonyms:	(±)-Pentane-1,2-diol; 1,2-Dihydroxypentane; 1,2-Pentylene Glycol; Diol PD; Hydrolite 5; NSC 513
CAS NO:	5343-92-0
EINECS:	226-285-3
Molecular Formula:	C ₅ H ₁₂ O ₂
Molecular Weight:	104.15
Melting Point:	50.86°C (estimate)
Boiling Point:	206 °C (lit.)
Density:	0.971 g/mL at 25 °C (lit.)
Appearance:	Clear colorless liquid

Description:

1,2-Pentanediol, CAS 5343-92-0, is a high-value chemical raw material with wide applications in various industries. Below is a detailed product description of this versatile molecule:

1,2-Pentanediol is a colorless liquid with a molecular formula of C₅H₁₂O₂ and a molecular weight of 116.1. Boiling point at standard pressure is 240°C, miscible with water, alcohols and esters.

1,2-Pentanediol is prepared via a multistep synthetic route that involves the reaction of acetaldehyde with ethylene oxide in the presence of a base catalyst. The product obtained is subjected to hydrogenation and purification steps to obtain the desired compound. This compound has important industrial applications as it serves as a building block for the synthesis of various organic compounds, polymers, surfactants and other specialty chemicals.

One of the main applications of 1,2-pentanediol is in the production of polyurethane. It reacts with isocyanates to form polyurethane polymers, which are widely used in rigid and flexible foams for insulation and padding purposes. Polyurethanes are also used as coatings, adhesives and sealants and have excellent mechanical and chemical resistance properties.

1,2-Pentanediol is also used in the production of polyester, a polymer composed of ester units linked together. It reacts with dicarboxylic acids or anhydrides to form polyester polymers, which are widely used in fibers, films, bottles and other packaging materials due to their mechanical strength and chemical resistance.

In addition, 1,2-pentanediol is used in the production of cosmetics and personal care products. It is used as a humectant and emollient in creams, lotions and moisturizers to keep skin soft and hydrated. It also acts as a viscosity reducer and solvent in various hair care products such as shampoo and conditioner.

1,2-Pentanediol is a valuable chemical raw material that plays a vital role in various industries. It is used as a base material for polyurethanes, polyesters, surfactants, cosmetics and other specialty chemicals. A wide range of applications makes it an important ingredient in a variety of commercial products, including insulation, foams, coatings, adhesives, sealants, fibers, cosmetics and personal care products.

Application:

1,2-Pentanediol, CAS 5343-92-0, is a high-value chemical raw material with a wide range of applications in different industries. Here are some common uses of this versatile molecule:

- Polymerization Agent:** 1,2-Pentanediol is used as a monomer for the production of polyesters and polyurethanes. It polymerizes with other monomers to form linear or cross-linked polymers with diverse applications in industries such as textiles, packaging, coatings, adhesives, sealants, and insulations.
 - Solvent:** 1,2-Pentanediol is miscible with water and other polar solvents and can be used as a solvent for various purposes such as cleaning, coating formulations, cosmetics, and personal care products. It has low toxicity and good biodegradability, making it an environmentally friendly solvent choice.
 - Coating and Adhesive:** 1,2-Pentanediol is used in the production of coatings and adhesives due to its ability to formulate viscous solutions that adhere well to various substrates. The polymers derived from 1,2-pentanediol provide good mechanical strength, chemical resistance, and durability to the coatings and adhesives.
 - Personal Care Products:** 1,2-Pentanediol is used in cosmetics and personal care products as a humectant and emollient. It helps to maintain skin softness and hydration and acts as a viscosity reducer and solvent in various hair care products such as shampoos and conditioners.
 - Textile Fibers:** Polyesters derived from 1,2-pentanediol are used in the production of textile fibers for clothing, carpets, and other applications. The fibers have good mechanical strength, abrasion resistance, and elasticity and can be dyed easily for various colors and shades.
 - Rubber and Plastics:** 1,2-Pentanediol is used in the production of rubber chemicals and plasticizers, which modify the mechanical and processing properties of rubbers and plastics.
 - Food and Beverage:** 1,2-Pentanediol is used as an artificial sweetener and flavoring agent in food and beverage industry. It imparts a sweet taste and enhances the flavor of various products.
 - Pharmaceuticals:** 1,2-Pentanediol is used as a starting material for the synthesis of various pharmaceutical intermediates such as antibiotics, antiviral agents, and anticancer drugs.
 - Agriculture:** 1,2-Pentanediol is used in agriculture as a plant growth regulator, pesticide carrier, and soil conditioner.
 - Production of Other Chemicals:** 1,2-Pentanediol is used as a feedstock for the production of other chemicals such as adipic acid, caprolactam, and polyamides through its reaction with other compounds such as adipic acid or amino acids.
- When using 1,2-Pentanediol, it is essential to follow appropriate safety measures as it is harmful if swallowed and may cause skin and eye irritation. We recommend handling this chemical with care and wearing protective equipment such as gloves and safety goggles during use.

Advantage:

1. Firsky (Wuhan) continues to make efforts to steadily offer clients high-quality items. We have put in place a reliable internal quality management system and are always working to increase quality, decrease deviation, and eliminate waste.
2. If you have any questions, don't hesitate to ask them; we'll get back to you within 48 hours.
3. After getting the items, if you have any questions, don't hesitate to get in touch with us. We promise to compensate you in full if we were the source of the loss.

FAQ:

How do I make a purchase?

We advise that you speak with our customer support personnel before placing an order because the market price of chemical raw materials fluctuates often

1. Please let me know which products you require and how many of each you need.
2. We will provide you with the best pricing right away, including delivery charges.
3. If the price seems reasonable to you, you can select a payment option to complete the transaction.
4. After we confirm your payment, your shipment will be wrapped and dispatched within 24 hours.
5. Two days after the package is sent out, a tracking number and packing photo will be provided.
6. We wish you a wonderful shopping experience and encourage you to get in touch with us if there are any problems.

Which delivery alternatives are available?

All Fushikai orders are shipped from Japan using FEDEX, UPS, DHL, Airmail, Surface Mail, EMS (Japan Post), and Economical Air (SAL). Depending on the various nations, we will select the best choice. Once payment has been received, the approximate delivery time is 5-7 working days.

How are your products verified?

We use our own quality control team to inspect each batch of products. Only at least 98% of pharmaceutical raw materials are used in the synthesis process, rather than cheap sources that are replicated using discarded chemical ingredients. Multiple tests are conducted using cutting-edge equipment to ensure perfect accuracy in determining the potency, purity and quality of ingredients and finished products.

Does a discount apply to large orders?

After your order reaches a particular value, there is a large discount. Several seasonal sales and promotions are available from us.

What forms of payment do you accept?

We accept payments with Western Union, Bitcoin, e-transfers, bank transfers, MoneyGram, and Alipay in addition to all other forms of cryptocurrency.

Do you deliver to parcel lockers at PO boxes?

YES, we could deliver to parcel lockers at PO boxes!

Can I get a tracking number from you?

We will provide you the tracking number and some images of the items you ordered as soon as the shipment is planned. For the most up-to-date tracking updates, please go to our preferred site.

 **Firsky International Trade (Wuhan) Co., Ltd**

 +86 15387054039

 admin@firsky-cn.com

 firskytech.com

No. 7, Xujiadai, Xin'andu Office, East-West Lake District, Wuhan, China