

Hydrotropy Agent Excipients



Hydrotropic agent excipients is a substance added to a mixture of two or more separate substances that are usually incompatible so they can be mixed. Hydrotropic agent excipients is added to increase the solvent capacity of the main substances in the mixture. **CD Formulation** provides customers with various excipient molecules. Our pharmacies or other professional researchers and experimenters are constantly developing new product solutions. We can custom hydrotropic agent excipients for customers, and can also provide customers with solutions for drug development and research.

About Hydrotropic Agent Excipients

Hydrotropic agents refer to the third substance that can form soluble intermolecular complexes, associations or double salts with poorly soluble drugs in the solvent. Hydrotropic agents are soluble in water and are mostly low-molecular compounds, which can increase the solubility of the drug several times or even dozens of times after forming a complex with the drug. The main difference is that the third substance added is a low-molecular compound, rather than a colloidal electrolyte or a non-ionic surfactant.

Advantages of Hydrotropic Agents

Increasing the solubility of poorly soluble drugs is beneficial to the preparation and application of preparations.

- Hydrotropic agents can also reduce some of the shortcomings of the original drugs, improve the quality of the preparations and develop new preparations.
- Hydrotropic agents can increase the stability of the preparation, improve the physical properties, correct smells, reduce irritation, improve absorption, and increase pharmacological effects.
- When choosing a co-solvent, it should be able to increase the solubility of poorly soluble drugs at a lower concentration.
- Does not affect the effect of the main medicine.
- No irritation and toxicity when used.
- Its stability remains unchanged during storage and sterilization.

Classification of Hydrotropic Agents

Commonly used hydrotropic agents can be divided into two categories: one is certain organic acids and their salts, such as sodium benzoate, sodium salicylate, p-aminobenzoic acid, *etc.* These are hydrotropic agents that are more commonly used in preparations; the other is amides compounds such as urethane, urea, acetamide and so on. But many other drugs also have better solubilizing effects.

1. Organic Acids

Sodium benzoate, also known as sodium benzoate. It is usually used for the antiseptic and anti-mildew of oral liquid medicines, especially the neutral or slightly alkaline medicines that are not suitable for preserving with benzoic acid and the antiseptic of food. This product is white granular, powder or crystalline powder; it is odorless or has a slight benzoin smell, and the taste is slightly sweet and salty. Easily soluble in water, slightly soluble in ethanol.

2. Amide Compounds

3. Other Hydrotropic Agents

Source: <https://www.formulationbio.com/products/hydrotrophy-agent-exipients.html>