



Niacinamide, also known as vitamin B3, is a water-soluble vitamin with numerous benefits for the skin. It is widely used in skincare products for its anti-inflammatory, brightening, and anti-aging properties.

Chemical Properties:

1. Chemical Structure:

- **Niacinamide** ($C_6H_9NO_4$) is the active form of vitamin B3. Its chemical structure consists of a pyridine ring with a carboxamide group ($-CONH_2$) attached to it. This structure allows niacinamide to interact with various biological processes in the skin.

2. Physical Properties:

- Niacinamide is a white, crystalline powder that is soluble in water. It is stable in a range of pH levels, which makes it suitable for use in various formulations.

3. Stability:

- Niacinamide is relatively stable compared to some other active ingredients. It maintains its efficacy across a range of pH levels and temperatures, making it a versatile component in skincare formulations.