

CAS Number: 57-13-6



Other Names: Carbamide; Carbonyldiamide; Isourea; Ureophil; Carbonyldiamine; Carbamimidic acid

Formula: CH₄N₂O or NH₂CONH₂

PRODUCT INTRODUCTION

Urea is a nitrogenous compound containing a carbonyl group attached to two amine groups with formula CH_4N_2O . It is a colorless, odorless solid, highly soluble in water, and non-toxic. It has pKa close to 0. It is neither acidic nor alkaline. Urea is widely used in fertilizers as a source of nitrogen (N) and is an important raw material for the chemical industry.

PHYSICAL AND CHEMICAL PROPERTIES

Nitrogen Content (as Total N) (on Dry Basis)	46.30 %
Moisture	0.07 %
Biuret	0.82 %
Sieve Analysis (1mm-3mm)	91.75 %

APPLICATIONS

- More than 90% of world industrial production of urea is destined for use as a nitrogen-release fertilizer. Urea has the highest nitrogen content of all solid nitrogenous fertilizers in common use.
- Urea is used in topical dermatological products to promote rehydration of the skin.
- It is a safe, non-corrosive fertilizer alternative for de-icing. The chemical is easy to use on runways and walkways as well as on landing gears and other vital parts located on the undercarriage of aircraft that must always be protected from corrosion.
- Urea in concentrations up to 10 M is a powerful protein denaturant as it disrupts the noncovalent bonds in the proteins.
- Urea is used in SNCR and SCR reactions to reduce the NOx pollutants in exhaust gases from combustion, for example, from power plants and diesel engines.

PACKAGING OPTIONS

Drums