DIMETHYL FORMAMIDE



CAS Number: 68-12-2

Other Names: N,N-Dimethylformamide; N,N-Dimethylmethanamide; DMF

Formula: C₃H₇NO or HCON(CH₃)₂

PRODUCT INTRODUCTION

Dimethylformamide appears as a water-white liquid with a faint fishy odor having chemical formula $HCON(CH_3)_2$. It is widely used in industries as a solvent, an additive, or an intermediate because of its extensive miscibility with water and most common organic solvents.

PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | Clear Liquid |
|----------------------------------|--------------|
| Color (APHA) | 3.0 |
| pH at 25°C in 20% solution | 7.0 |
| Conductivity in 20% water @ 250C | 0.80 |
| Dimethyl Formamide Content (%wt) | 99.98 |
| Water Content (%w) | 0.005 |
| Methanol Content (%wt) | < 0.001 |
| Acidity as Formic Acid (mg/kg) | 4.0 |
| Base as DMA (mg/kg) | 1.0 |
| Iron ppm | 0.010 |

APPLICATION

- Dimethylformamide is commonly used as a solvent.
- It is used as a reagent in Bouveault aldehyde synthesis and also in Vilsmeier-Haack reaction.
- It acts as a catalyst in the synthesis of acyl chlorides.
- It is used for separating and refining crude from olefin gas.
- DMF along with methylene chloride acts as a remover of varnish or lacquers.

- It is also used in the manufacture of adhesives, fibers and films.
- DMF penetrates most plastics and makes them swell. Because of this property DMF is suitable for solid phase peptide synthesis and as a component of paint strippers.

PACKAGING OPTIONS

Drums