

# DIMETHYL ACETAMIDE

CAS Number: 127-19-5

Other Names: N,N-Dimethylacetamide; Dimethylamide acetate

Formula:  $C_4H_9NO$  or  $CH_3CON(CH_3)_2$

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## PRODUCT INTRODUCTION

Dimethyl acetamide (DMAC) is a member of the class of acetamides that is acetamide in which the hydrogens attached to the N atom have been replaced by two methyl groups respectively. It appears as a clear colorless liquid with a faint odor similar to ammonia.

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## PHYSICAL AND CHEMICAL PROPERTIES

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|---------------------------------------|--------------------------|
| Appearance                            | Clear without suspension |
| Purity %                              | 99.97 PCT                |
| Color (Hazen ) (Pt-Co)                | 4                        |
| Moisture %                            | 0.006 PCT                |
| Acidity (based on Acetic acid) %      | 0.003                    |
| Alkalinity (based on Dimethylamine) % | Not Detected             |
| Iron Content                          | Not Detected             |
| Conductivity (25 °C)                  | 0.02                     |

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## APPLICATIONS

- Dimethyl acetamide (DMAC) is a dipolar aprotic solvent used for many organic reactions and industrial applications. It is a versatile solvent due to its high boiling point and good thermal and chemical stability.
- Acrylic fibers- DMAC is applied as solvent in wet spinning processes for the production of acrylic fibers.
- Elasthane fibers- In the production of polyurethane-based elasthane fibers, DMAC is the solvent of choice given its evaporation speed, whether it is used in wet or dry spinning processes.

- Pharmaceuticals- DMAC can be used both as a solvent and as a reagent in the production of various pharmaceuticals. In the production of novel x-ray contrast media, DMAC is used as a solvent. Cephalosporins, which are among one of the leading classes of antibiotics, are partly produced from derivatives of 7-ADCA (7-aminodeacetoxy-cephalosporanic acid). DMAC is used in the manufacturing process.
- Various polymers- DMAC is a good solvent for polyimide resins, both in coating and film production. It is also the ideal solvent for the production of dialyser membranes, based on polysulfones. A mixture of DMAC and lithium chloride is a useful solvent for cellulose fibers in several applications.

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## **PACKAGING OPTIONS**

Drums

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