



## DIMETHYL FORMAMIDE – CG26003

Dimethylformamide, DMF is an organic compound with the chemical formula  $\text{HCON}(\text{CH}_3)_2$ . Its structure is  $\text{HC}(\text{=O})\text{-N}(\text{-CH}_3)_2$ . Commonly abbreviated as DMF (although this initialism is sometimes used for dimethylfuran, or dimethyl fumarate), this colourless liquid is miscible with water and the majority of organic liquids. DMF is a common solvent for chemical reactions. Dimethylformamide is odorless, but technical-grade or degraded samples often have a fishy smell due to impurity of dimethylamine. Dimethylamine degradation impurities can be removed by sparging samples with an inert gas such as argon or by sonicating the samples under reduced pressure. As its name indicates, it is structurally related to formamide, having two methyl groups in the place of the two hydrogens. DMF is a polar (hydrophilic) aprotic solvent with a high boiling point. It facilitates reactions that follow polar mechanisms, such as  $\text{S}_{\text{N}}2$  reactions.

### Product Specification

Property	Method	Value
Color Pt-Co	ASTM D5386	10 Max
BA Purity	DOWM 102538	99.5% mass min
Acidity	ASTM D1613	0.009% mass max
Water	ASTM E203	0.05% mass max
Inhibitor, ppm MEHQ	DOWM 102538	10-20 PPM
Appearance (particulates)	DOWM 101967	Substantially Free

