



## Methylene Blue

Biological Dye, Antimicrobial agent, DNA and RNA tracker

A biological basic dye used as antibacterial agent. It is proven that Methylene Blue is effective against Gram-positive bacteria. Methylene Blue is sensitive to light and water vapor. So, it would be stored in dark bottles and keep away from humidity.

It is found that concentration of nitrite ion is correlated with antimicrobial activity of methylene blue. Because of the positive charge of methylene Blue, it can bind to negatively charged components of cell such as DNA and RNA. So this dye can determine RNA and DNA in a gel or under microscope.

Cat. Number	ASC-1008
CAS Number	61-73-4
Additional CAS	7220-79-3 (.3H <sub>2</sub> O)
Additional CAS	122965-43-9 (.xH <sub>2</sub> O)
MDL Number	MFCD00012111
Color Index	52015
PubChem	310276715
Molecular Weight	319.85 gr/mol
Molecular Formula	C <sub>16</sub> H <sub>18</sub> ClN <sub>3</sub> S
Storage Temperature / Condition	20 °C / Keep away from strong oxidizing agents.
Form and Color	Crystalline Powder / Dark green
Solubility	Soluble in water/ acetic acid / chloroform / glycerol / alcohol. Insoluble in ether.
Purity	≥ 98 %
Arsenic (As)	≤ 8 ppm
Copper (Cu) – Zinc (Zn)	≤ 0.02 %
Loss on Drying	≤ 20 %