

Specification: Bronopol (2-Bromo-2-nitro-1,3-propanediol)

Items	Bacterial grade	Cosmetic grade	30% Solution
Appearance	White Crystalline Granule	White Crystalline Granule	Clear slight yellow liquid
Main Content	99.0-101.0%	99.0-101.0%	30%
Melting Point	126.0----131.0 degree	126.0----131.0 degree	1.23-1.33
Moisture	0.5%	0.5%	-
PH	5.0-7.0	5.0-7.0	3.7-6.7
Solubility Test (20%Water Solution)	Clear or almost clear solution	Clear or almost clear solution	-
Appearance of Solution (20% in CH ₃ OH)	Clear or almost clear solution	Clear or almost clear solution	-
Impurity%	0.3	0.3	-
Bromate color	--	Do not appear blue in 5 minutes	-
Shelf life	2 years	2 years	6 months

Application of Bronopol (2-Bromo-2-nitro-1,3-propanediol)

- Preservative for pharmaceuticals;
- Preservative in shampoos and cosmetics;
- As antimicrobial in paper mills, oil exploration;
- Used in cooling water disinfection system.

Other Names

2-Bromo-2-nitropropane-1,3-diol
 2-Nitro-2-bromo-1,3-propanediol
 beta-Bromo-beta-nitrotrimethyleneglycol
 Bronopolu
 Bronopolum

Certificate of Analysis (COA, TDS)

Name of Product	Bronopol (2-Bromo-2-nitro-1,3-propanediol) BP	CAS: 52-51-7
Testing Item	Standard	Result
Appearance Bronopol	White or almost white crystals or crystalline powder	Complies
Identification	Should comply.	Complies
Melting Point Bronopol	123°C ~ 131°C	130.1°C ~ 130.7°C
Acidity or alkalinity	pH 5.0 ~ 7.0 (1% w/v)	5.3
2-methyl-2-nitropropane-1,3-diol	≤ 0.5%	0.01%
Tris (hydroxymethyl)nitromethane	≤ 0.5%	0.03%
NaBr	≤ 0.5%	0.03%
Any other impurity	≤ 0.1%	0.01%
Water (KF)	≤ 0.5%	0.11%
Sulphated Ash	≤ 0.1%	0.02%
Purity (Assay)	99.0% - 101.0% Bronopol	99.56%

Remarks: Product Available in various pharmacopoeia standards.