



## 2-Bromo-2-nitro-1,3-propanediol [Bronopol]

### **SYNONYMS:**

Bronopol;2-Bromo-2-nitropropane-1,3-diol;1,3-Propanediol, 2-bromo-2-nitro-2-Bromo-1-nitro-1,3-propanediol;2-Nitro-2-bromo-1,3-propanediol;3-Propanedio  
1,2-bromo-2-nitro-1;beta-Bromo-beta-nitrotrimethyleneglycol;Bioban BNPD-40;

**CAS No:** 52-51-7

**MOLECULAR FORMULA:** C<sub>3</sub>H<sub>6</sub>BrNO<sub>4</sub>

### **PROPERTIES:**

Appearance - Bronopol is supplied as crystals or crystalline powder, which may vary from white to pale yellow in color depending on the grade of material being offered.

Melting Point: As a pure material, Bronopol has a melting point of about 130° C. However due to its polymorphic characteristics, Bronopol undergoes a lattice rearrangement at 100 to 105° C and this can often be wrongly interpreted as the melting point. At temperatures above 140° C Bronopl will decompose exothermically releasing Hydrogen bromide and oxides of Nitrogen.

Solubility - Bronopol is readily soluble in water although the dissolution process is endothermic. Solutions containing up to 28% w/v are possible at ambient temperature. Bronopol is poorly soluble in non-polar solvents but shows a high affinity for polar organic solvents.

### **SPECIFICATION:**

Appearance	White Crystalline
Powder Assay	99 % min
Melting Point	123 - 130°C
Moisture	0.5 % max

### **USAGE:**

It is widely used in industrial circulating water, biocide, germicide, paper pulp, paint, plastic, timber-cooling circulating water and other industries. In addition, it can be used to prevent daily-used cosmetic products from moldly and corrosion.

### **PACKING**

25Kgs net drum.