SPECIFICATION

PRODUCT NAME: PROPYLENE GLYCOL

ORIGIN:CHINA

[Product Description](javascript:;)

Product Parameters

**Appearance:**colorless, viscous, transparent liquid.  
**Solubility:**miscible with Water, soluble in Ethanol, Ether, Mo.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Index** | **Tech** | **High** | **USP** | |
| **China standard** | **International standard** |
| Purity (as PG by wt %) | 99.5 min | 99.5 min | 99.5 min | 99.8 min |
| Moisture by wt % | 0.2 max | 0.2 max | 0.2 max | 0.1 max |
| Color APHA, Pt-Co | 10 max | 5 max | 10 max | 10 max |
| Specific Gravity d2020 | 1.037~1.039 | 1.036~1.039 | 1.035~1.037 | 1.035~1.039 |
| Index of Refraction nD20 | 1.431~1.435 | 1.430~1.435 | 1.431~1.432 | 1.431~1.435 |
| Free acid (as CH3COOH) by ppm | 75 max | / | / | / |
| Free acid (ml 0.1N NaOH/10ml) | / | / | 0.05 max | 0.01 max |
| Alkalinity (as OH- mmol/100g) | / | 0.05 max | / | / |
| Residue on ignition by ppm | 80 max | / | 70 max | 20 max |
| Distillation range (IBP-DP) by ºC | / | 183~189 | / | 186~189 |
| Distillation range (L) by ºC | 184~189 | / | 184~189 | / |
| Distillation range (U) by ºC | 184~189 | / | 184~189 | / |
| Distillation volume, by vol% | 95 min | / | / | / |
| Chloride as Cl by wt % | / | / | 0.007 max | 0.0001 max |
| Suphate as SO42- by wt % | / | / | 0.006 max | 0.001 max |
| Heavy metal as Pb by ppm | / | / | 5 max | 5 max |
| Iron as Fe by ppm | / | / | 0.5 max | 0.5 max |
| Arsenic by ppm | / | / | 1 max | / |
| Ethylene Glycol by ppm | / | / | 0.008 max | / |
| Diethylene Glycol by ppm | / | / | 0.008 max | / |
| Odor | yes | yes | Slight odor | odorless |

Application

1. Propylene glycol is used for similar applications as other glycols;  
2. Propylene glycol is an important raw material for unsaturated polyester, epoxy resin, and polyurethane resin. The use amount in this area accounts for about 45% of the total consumption of propylene glycol. Such unsaturated polyester is used extensively for reinforced plastics and surface coatings. Propylene glycol is excellent in viscosity and hygroscopicity and is non-toxic, and thus is widely used as hygroscopic agent, antifreeze, lubricants and solvents in the food, pharmaceutical and cosmetic industry. In the food industry, propylene glycol reacts with fatty acid to give propylene ester of fatty acids, and is mainly used as food emulsifier; Propylene glycol is a good solvent for flavorings and pigments. Propylene glycol is commonly used as solvents, softeners and excipients, etc. in the pharmaceutical industry for the manufacture of various types of ointments and salves. Propylene glycol is also used as a solvent and a softener for cosmetic since it has good mutual solubility with various spices. Propylene glycol is also used as tobacco moisturizing agents, antifungal agents, food processing equipment lubricants and solvents for food marking ink. Aqueous solution of propylene glycol is an effective anti-freeze agent.

