

## CERTIFICATE OF ANALYSIS

<b>Name Of Commodity: 1,4-Butanediol (BDO)      Specification: ≥ 99.5%</b> <b>Molecular Formula: C<sub>4</sub>H<sub>10</sub>O<sub>2</sub></b> <b>CAS Registry Number: 110-63-4    EINECS: 203-786-5    H S CODE: 29053990</b>			
<b>Standard: COMPLYS WITH STANDARD OF GB /T24768-2009</b>			
<b>Package and Storage: Plastic cask or drum made of aluminum, stainless steel or galvanized iron and also in the tank car according to the provisions of transporting poisonous and harmful goods. BDO can be stored indefinitely if package hermetically and don't touch the thermal energy. Under the nature condition the BDO is nonexplosible, combustible but can't spontaneously combust.</b>			
<b>Testing Items</b>	<b>High-Class</b>	<b>Qualified Product</b>	<b>Testing Results (%)</b>
<b>1,4-Butanedi (BDO) w/% Min ≥</b>	<b>99.7</b>	<b>99.5</b>	<b>99.7</b>
<b>Chrominance / Hazen unit (Pt-Co color number ) Max ≤</b>	<b>10</b>	<b>10</b>	<b>4.0</b>
<b>Water, W / % Max ≤</b>	<b>0.03</b>	<b>0.05</b>	<b>0.008</b>
<b>Notes:</b> <b>Form: Colorless oily liquid, Combustible, Miscible with water, soluble in methyl alcohol, ethanol or acetone, sparingly soluble in diethyl ether Hygroscopic, bitter in taste.</b> <b>The Freezing Temperature: 20.1°C</b> <b>The melting Temperature: 20.2°C</b> <b>The Boiling Temperature : 228°C</b> <b>The relative Density: 1.0171 (20/4°C)</b> <b>The opening flash Point: 121°C</b> <b>The ignition point: 370°C</b> <b>The refractive index: 1.446</b> <b>USE: BDO used as important raw materials for producing engineering plastics polybutylene terephthalate (PBT), tetrahydrofuran, γ-butyrolactone, polyurethane leather, Thermoplastic Polyurethane and polyurethane</b>			
<b>BATCH NO.: 2023.02.25-057 (II)    Date: FEB.25,2023</b>			