



## 1,4 丁二醇

### 1,4BG (1,4-butanediol)

#### 說明 Description

1,4-butanediol 為一無色油狀純淨液體，在室溫下黏度適中且揮發性低，溫度低於20°C時，1,4BG 會凝固成白色結晶物質。

Above 20°C, 1,4-butanediol is a colourless, clear liquid; at room temperature, the liquid shows medium viscosity and low volatility. Below the melting point of 20°C, 1,4-butanediol solidifies to give a white, crystalline mass.

#### 規格 Specifications

項目 Properties	單位 Unit	規格 Specification	分析方法 Analysis Method
外觀 Appearance	-	透明、清澈液體 Clear, Transparent Liquid	目視檢查 Visual Inspection
純度 Purity	wt %	Min. 99.5C	Gas Chromatography
色澤 Color	APHA	Max. 10	JIS K 0071-1993
水份 Moisture	wt %	Max. 0.03	JIS K 0068-1992
比重 Specific Gravity (25/4°C)	-	1.012 ~ 1.016	JIS K 0061-1992

#### 物性 Physical Properties

化學文摘社登記號碼	CAS No.	110 - 63 - 4
構造式	Structure formula	HO(CH <sub>2</sub> ) <sub>4</sub> OH
同義字	Synonyms	Butanediol、1,4-Butylene glycoL、1,4-Tetramethylene glycol
分子量	Molecular Weight	90.12
比重	Specific Gravity	1.015(liq.) @ 20/4°C
熔點	Melting Point	20.1°C
沸點	Boiling Point	228.1°C
水溶解度	Solubility in Water	≥ 100 mg/mL @23°C
蒸氣壓	Vapor Pressure	< 1mmHg @38°C
蒸氣密度	Vapor Density	3.1
閃火點	Flash Point	138°C
其它物理性質	Other Physical Properties	
沸點	Boiling Point	120°C @10mmHg
折射率	Refractive Index	1.445 @20°C
結晶度	Crystallizes below	< 65F
氣味	Odor	近乎無味 Nearly odorless

#### 用途 Usage

由於丁二醇上的兩個末端基OH 緣故，丁二醇能與許多單官能基與雙官能基化合物進行反應，因此丁二醇及其衍生物可作廣範的應用。

丁二醇被提及最重要的應用分別為經脫水、脫氫製造如聚酯、PUTHF、γ-丁內酮。另外丁二醇亦用在製藥及塑膠工業上許多合成用的中間物。

Owing to its two terminal OH groups,1,4BG can be reacted with a large number of mono- and bifunctional compounds,opening a wide range of applications for 1,4BG and its derivatives.

For example polyesters and polyurethanes, and the heterocycles tetrahydrofuran and γ-butyrolactone,which are prepared by dehydration or dehydrogenation, respectively, may be mentioned as the most important application for 1,4BG.In addition, 1,4BG is used for the synthesis of many intermediates, which can also be used in pharmaceutical and plastics industries.



## 包裝型式 Packing Type

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200 Kg/Steel Drum

槽車(22T) Lorry

## 成品外觀 Appearance

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