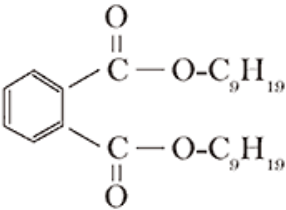# DINP (Di-Isononyl Phthalate) 鄰苯二甲酸二異壬酯

說明 Description

DINP是由Iso-Nonanol與Phthalic Anhydride酯化而成。在許多方面DINP的塑化性質與DEHP類似。然而DINP本身所具備的低揮發性與低可塑化效率，使得DINP在一些應用上頗佔優勢。DINP屬一般用途的可塑劑，與DEHP比較，它擁有較低的可塑化效率、移行性、水萃取率及稍高的膠化溫度與電子阻抗。DINP低揮發性，不僅能延長產品壽命還能降低製程中的蒸發逸散。以DINP來取代具有較高可塑化效率及比重的DEHP，往往可以節省相當的體積成本費用。

DINP is produced by esterifying Isononanol and Phthalic Anhydride. DINP's plasticizing characteristic is similar to that of DEHP in many ways. However, DINP's low volatility and low plasticizing efficiency are advantageous in some applications. DINP is a plasticizer for general purpose. To compare with DEHP, its plasticizing efficiency, migration and water extraction rate are lower and its gelation temperature and electric resistivity are midly higher. DINP's low volatility not only prolongs the service life of product but also reduces the evaporation during process. DINP can be used to substitute DEHP, of which the plasticizing efficiency and specific gravity is higher, to save a considerable cost per volume.

規格 Specifications

色 相 Appearance		APHA	25	Max
酸 價 Acid Value		mgKOH/g	0.05	Max
酯化價 Esterification Number		mgKOH/g	267±5	
加熱減量 Heating Loss	125℃x3hr	wt %	0.10	Max
比 重 Specific Gravity	20/20℃		0.974±0.005	
折射率 Refractive Index	25℃		1.484±0.003	

物性 Physical Properties

分子式 Molecular Formula:
$C_{26}H_{42}O_4$

構造式
Structural Formula

分子量 Molecular Weight	g/mole		419
沸 點 Boiling Point	（760mmHg）	℃	403
閃火點 Flash Point		℃	213
粘 度 Viscosity	（30℃）	cps	45
流動點 Freezing Point		℃	−50

用途 Usage

電線電纜、膠皮膠布、手套、鞋子、建材、塑膠製品、食品包裝、玩具及吹氣

Wires & Cables, Leather & Clothes, Gloves, Shoes, Construction Materials, Food Wrapping, Toys and Plastic Inflation Products, PVC Plastisols, etc.