

Technical Data Sheet

April 2015

Formula

C₂₈H₄₆O₄

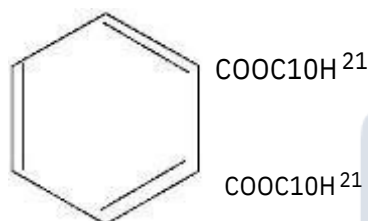
Molecular Weight

446

CAS Registry Number

26761 – 40 - 0

Molecular Structure



Payflex P100

(DIDP –Di-Iso Decyl Phthalate)

Product Specifications	Value	Test Method
Specific gravity @ 27°C	0.960 – 0.966	ASTM D-1045
Ester Content ,%weight, minimum	99.50	ASTM D-1045
Volatile loss @130°C/3 hours, %weight	0.10	PPTM ASTM D-1045
Colour ,Pt-Co ,unit(HU) ,maximum	20	ASTM D-1045
Plasticizing Ester ,% by GLC , minimum	99.50	ASTM E-203
Water , % by weight , maximum	0.10	IS-9591-96
Heat stability @ 180°C / 2 hours	No change in colour	ASTM D-1045
Acidity as Acid % by mass ,maximum	0.01	ASTM D-1045
Ester Value (mgKOH/gm)	250 ± 3	Visual
Suspended matter	COLSFFM*	

*Clear Oily Liquid Substantially Free Of Foreign Material

Typical Physical Properties	
Apparent Specific Gravity @ 25/25°C.....	0.9662
Coefficient of expansion, @ 25°C per °C.....	0.00074
Solubility @ 25°C, in water, % by wt	≤ 0.01
Boiling Point @ 6 mbar, °C.....	260
Pour Point, °C	- 40
Absolute Viscosity @ 20°C, cp.....	114
Refractive Index ND 27.....	1.483
Flash Point (COC) °C.....	232
Odor.....	Mild Characteristic

*The Properties value above are just for reference and not to be considered as guaranteed

Description

Payflex P100 provides to the vinyl formulator a primary, monomeric plasticizer characterized by low volatility and good resistance to extraction by soapy water. The low vapor pressure of Payflex P100 suggests its use in high temperature processing, in applications such as wire and cable formulations where heat aging resistance is required and in areas where emissions of volatile components into the atmosphere during processing is subject to restriction.

In wire & cable formulations, Payflex P100 finds wide use in 75°C THW building wire compounds and in 80°C and 90°C appliance wire insulation.

Safety

Payflex P100 does not require special handling. Handle in accordance with good industrial hygiene and safety practices. Avoid eye contact by wearing personal protective equipment. If eye contact occurs, wash with flowing water and contact a physician. Avoid repeated or prolonged skin contact. Avoid breathing vapors by providing adequate ventilation.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on safety.

Packaging

Payflex P100 is available in bulk tank trucks or bulk rail cars.

Storage & Packaging

Payflex P100 has 24 months of shelf life when properly stored in closed containers.