

# Payflex P-80

## (DOP-Di-(2-ethylhexyl)Phthalate)



### Technical Data Sheet

April 2015

### Formula

C<sub>24</sub> H<sub>38</sub> O<sub>4</sub>

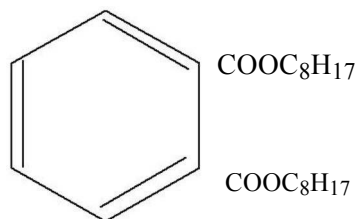
### Molecular Weight

390

### CAS Registry Number

117 – 81 - 7

### Molecular Structure



| Product Specifications                 | Value               | Test Method |
|----------------------------------------|---------------------|-------------|
| Specific gravity @ 27°C                | 0.980 – 0.986       | ASTM D-1045 |
| Ester Content ,%weight, minimum        | 99.50               | ASTM D-1045 |
| Volatile loss @130°C/3 hours, %weight  | 0.10                | PPTM        |
| Colour ,Pt-Co ,unit(HU) ,maximum       | 20                  | ASTM D-1045 |
| Plasticizing Ester ,% by GLC , minimum | 99.50               | ASTM D-1045 |
| Water , % by weight , maximum          | 0.10                | ASTM E-203  |
| Heat stability @ 180°C / 2 hours       | No change in colour | IS-9591-96  |
| Acidity as Acid % by mass ,maximum     | 0.01                | ASTM D-1045 |
| Ester Value ( mgKOH/gm )               | 287 ± 3             | ASTM D-1045 |
| Suspended matter                       | COLSFFM*            | Visual      |

\*Clear Oily Liquid Substantially Free Of Foreign Material

### Typical Physical Properties

|                                              |                     |
|----------------------------------------------|---------------------|
| Apparent Specific Gravity @ 25/25°C.....     | 0.9822              |
| Coefficient of expansion, @ 25°C per °C..... | 0.00075             |
| Solubility @ 25°C, in water, % by wt .....   | ≤ 0.01              |
| Boiling Point @ 6.7 mbar, °C.....            | 231                 |
| Pour Point, °C .....                         | - 46                |
| Absolute Viscosity @ 20°C, cp.....           | 81                  |
| Refractive Index N <sub>D</sub> 27.....      | 1.485               |
| Flash Point (COC) °C.....                    | 218                 |
| Odor.....                                    | Mild Characteristic |

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

### Description

The outstanding cost performance characteristics and balance of properties of Payflex P80 have made it the most widely used plasticizer in vinyl formulations. Payflex P80 is not only the major general purpose plasticizer in vinyl formulations, but also exhibits good compatibility with a broad spectrum of polymeric systems. Payflex P80 has good electrical properties and excellent heat and light stability. Its good solvating power for vinyl allows a broad tolerance for secondary plasticizers.

### Applications

Standard plasticizer for PVC characterized by low volatility, heat resistance. Low temperature resistance, High generation capacity and good electrical properties and good fusion behaviour. Most widely used all purpose plasticizer. Payflex 80 finds its major applications in Vinyl products , Bottle caps, and closures , Bottles, Coatings, Decorative film, fabric coatings, fishing lures, Flexible medical plastic, flexible medical , floor tile, Garden hoses, Hoses, Vinyl flooring, PVC applications, Sheet vinyl flooring, Vinyl compounding , Textile Industry, Upholstery, Vinyl gloves.

### Safety

Payflex P80 does not require special handling. Handle in accordance with good industrial hygiene and safety practices. Avoid eye contact by wearing personal protective equipment. Avoid repeated or prolonged skin contact. Avoid breathing vapors by providing adequate ventilation.

### Packaging

Payflex P80 is available in bulk and drum packaging.

### Storage & Handling

Payflex P80 has 24 month of shelf life when properly stored in closed containers and kept in cool,dry and ventilated area.

**“We stretch ourselves to give you flexibility “**