# **Technical Data Sheet**

# Di(2-Propylheptyl) Phthalate (DPHP)

# **Product Description:**

Di(2-Propylhexyl) Phthalate, also known as DPHP, is an odorless, clear, colorless liquid. It is almost immiscible in water, but readily soluble in most organic solvents. This product has low volatility due to the low amount of moisture and residual alcohol. It can be used as a direct replacement for DEHP and DINP in many applications. Not as compatible with as many secondary plasticizers as DOP.

# **Applications:**

Di(2-Propylhexyl) Phthalate is used as a primary plasticizer in PVC and PVC copolymers. Suitable for high temperature applications such as wiring, cabling and automotive interior trim. Its excellent weathering resistance makes it suitable for outdoor applications such as roofing membranes and tarpaulins.

#### Chemical Formula:

 $C_{28}H_{46}O_4$ 

### CAS No.:

53306-54-0

### **Specifications:**

| Parameters (units)                                    | Specifications                 |
|---|--------------------------------|
| Colour (Pt-Co)  | ≤ 20                           |
| Volatiles, heated at 130 °C for 3 hrs (%)             | ≤ 0.10                         |
| Ester value (mg KOH/g)                                | 249 - 254                      |
| Acidity (%)   | ≤ 0.010                        |
| Moisture (%)  | ≤ 0.10                         |
| Specific gravity, at 27 °C                            | 0.957 - 0.965                  |
| Ester content (%)                                     | ≥ 99.50                        |
| Heat stability, heated to 180 °C for 2 hrs            | No change                      |
| Acidity, after heat treatment, approx. (%)            | 0.03                           |
| Plasticizing esters (% by area)                       | ≥ 99.50                        |
| Residual alcohol (% be area)                          | ≤ 0.10                         |
| Volume resistivity $(\Omega.cm)$                      | $(5.5 \pm 1.0) \times 10^{11}$ |
| Boiling point, at 7 mbar (°C)                         | 251 - 254                      |
| Pour point, approx. (°C)                              | -48                            |
| Viscosity, at 20 °C (cP)                              | 120 - 124                      |
| Flash point, approx. (°C)                             | 232                            |
| Refractive index, at 27 °C                            | 1.483 - 1.486                  |
| *% denoted represents wt/wt %, unless noted otherwise |                                |

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