# DIISODECYLPHTHALATE (DIDP)

## GENERAL DESCRIPTION:

Product received from phthalic anhydride under reaction with isodecanol in esters; plasticiser. Used in the production of rigid and soft PVC, applies in the pastes and isolation of cables.

Trade Name: DIISODECYLPHTHALATE
Chemical Name: Phthalic diisodecylester
Chemical Formula: $C_6H_4(COOC_{10}H_{21})_2$
CAS Number: 26761-40-0

## TECHNICAL QUALITY CONDITIONS:

| Properies | Limits | Method |
|---|---|---|
| Appearance | Clear, Colourless Liquid | visual |
| Odour | Slight, Typical | |
| Moleculer Weight | 446 | |
| Water Content | Max. 0,05% | ASTM D 1364 |
| Viscosity (20 ºC ) | 110-122 cp | ASTM D 1045 |
| Density (20 ºC) | 0,964 – 0,970 g/cm³ | areometer |
| Refractive Index (20 ºC) | 1,4840 - 1,4880 | ASTM D 1045 |
| Acid Index | Max. 0.07 mg KOH /g | ASTM D 1045 |
| Flash Point | Min. 220 ºC | OPEN POT |

## ADVANTAGES

- Does not cause any chemicals structure of the polymers, but provides the requested physical and mechanical changes.
- Causes all the polymeric materials easy and quick jelly.
- Could be solved with all general solvents.
- Extends the life of plastics by increasing the resistance to heat.
- Could be mixed with all monomers at soften of PVC.
- Volatility is low.
- High electrical resistance.
- Could not be extracted with water.
- At low temperature processes increases the refractive index.
- At PVC paste application, extend it’s life when compared with DOP.
- It has high temperature stability.