# **DOTP 2020**



# Advantages of DOTP 2020 compared to DOP

- DOTP is not carcinogenic like DOP which was restricted for use, in many European countries, on the objects such as toys, nappy, diapers, medical equipment, artificial leather and water hoses and pipe which are in direct contact with people and is not limited as carcinogen DOP. You can place the phrase "DO NOT CONTAIN THE CANCEROGENIC DOP" on your products.
- Because it has a different structure from the phethalic-base plasticizers, its migration is very low;
  therefore, the materials that are made with using DOTP last much longer.
- Due to its structure, it has a low flexibility and this decrease plastics fragile of lower heat.
- Due to its structure features, it has self-lubricating features; therefore, preparation of the plastisol is done in the shortest time and with spending much less energy.
- Its plastisol viscosity is very stable and does not change for days. Accordingly, it generates a product in a more uniformed thickness. The plastisol viscosity of the DOP is variable and this causes both product loss and time during production.
- Due to the DOTP's low volatility, it can be used instead of DINP and DIDP.
- Due to its low migration, the lacquered material known as the "lacquer pollution" will not stick to the lacquered surfaces which is an undesirable situation on the PVC-based products and materials cannot stick lactic surface.
- Due to its excellent electrical features, it is a plasticizer that is preferred in cable productions

### **PROPERTIES**

Chemical Formula	: (C6H4)(COOC8H17)2
Molecular Weight g/Mol	: 390
Appearance	: Clear, Colorless Liquid
Odor	: Slight odor, Typical
Color (Hazen)	: Max. 30
ESTER CONTENT (WT %)	: MIN 99.0
WATER CONTENT (WT %)	: MAX 0.030 (ASTM D 1364)
ACID NUMBER (mg KOH/g)	: MAX 0.100 (ASTM D 1045)
TYPICAL VISCOSITY @ 25°C (c Poise)	: 60 (ASTM D 1045)
DENSITY@20°C (g/cm3)	: 0.980 - 0.984 (ASTM D 1045)
REFRACTIVE INDEX AT 25°C	: 1.485 (ASTM D 1045)
Flash Point °C	: MIN 190 (ASTM D 1045)

- -This specification describes a grade of DOTP 2020 Plasticizer, which meets all of the requirements listed in above when tested as directed by the referenced test methods.
- Analytical reference test methods given in above are GAM internal test methods. The person performing methods described herein must be thoroughly trained and under the supervision of a professional person who is knowledgeable in the relevant methods. The compliance of the specified grade of DOTP 2020 Plasticizer with the specific downstream use is within the responsibility of the user.

# **DOTP 2020**



#### **GENERAL**

DOTP 2020 ester, free phthalate plasticizer, plasticizer obtained by the reaction of PTA with 2-ethyl hexzanol

## FIELDS OF USE

Used as a softener in all PVC paste and pulp mixtures. Used in all calendaring, extrusion, injection and rotational, dip molding systems and coating., automotive sector, cable production, synthetic leather production, bookbinding fabric production, PVC floor cloth production, production of goods not containing phthalate (toy sector, bookbinding fabric production, production of some hoses, table cloth, etc.), PVC door mat production, tarpaulin production.

Plasticizer is a general purpose safer plasticizer for safer environment than most ortophthalate plasticizers. When all the physical features are analyzed in terms of physical and permanent features, DOTP has best physical and permanent characteristics inside of plasticizers. It is used in all kinds of PVC applications such as artificial leather, footwear, cables, hose and canvas.

### ADVANTAGES

- DOTP 2020 does not contain Esters of ortho-phthalate which are banned or restricted in European countries
- Based on Technical data gives better results than the equivalent products.
- In comparison to other phthalate products gives the best results economically.
- Does not lead to any changes in the chemical structure of the polymer.
- Provides the desired change in the physical and mechanical properties.
- Generally all the polymeric materials can expand easily and quickly.
- Prevent cracks in lac application, increases durability, and provides a smooth surface.
- Provides Elasticity in the desired product.
- Provides electrical resistance.