

Plasticizers

Product Range



HARKE

Coatings &
Polymers



Coatings, Plastics &
Polymers

OVERVIEW

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YOUR PARTNER FOR COATINGS, PLASTICS & POLYMERS



PLASTICIZERS

Within our CPP – Coatings, Plastics & Polymers, a Business Unit of HARKE GROUP, we are offering our customers a wide range of raw materials for these segments including fillers, pigments, additives and Plasticizers.

By offering these products, we are supporting our customers in the evaluation and development process and provide solutions due to SVHC concerns or raw material shortages. Our range of Plasticizers are available in different packagings like drums, IBC's up to ISO- or Flexi-Tanks.

Due to our experience and knowledge in this product segment, we are able to support our customers in all steps during the development up to the final product.

We are separating the Plasticizers in this brochure into Phthalate-, Non-Phthalate Plasticizers and Secondary Plasticizers like Chlorinated Paraffin, Epoxidized Soybean Oil and Process Oils.



Esters

DMP



DMP is the aromatic diester of methyl alcohol and phthalic acid, manufactured by catalytic esterification of methyl alcohol with phthalic anhydride. DMP is a colorless, light fast, faint aromatic odoured liquid and finds applications as plasticizers for nitrocellulose and cellulose acetate resins. It yields excellent films having good adhesion with both, in proportions upto 75% of the weight of the cellulose ester. It also plasticizes rubber and Poly Vinyl Acetals. Other applications include Fiber Reinforced Plastics, solid rocket propellants, lacquer plastics, rubber coating agents, safety glass, molding powders, cement concrete additive, insect repellants and perfumery compounds.

DEP



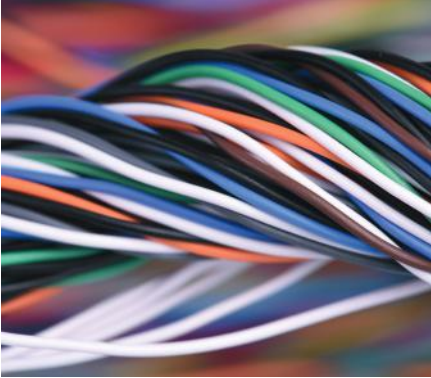
DEP is the aromatic diester of ethyl alcohol and phthalic acid, manufactured by catalytic esterification of ethyl alcohol and phthalic anhydride.

DEP enjoys wide popularity for lacquer work. It is a good wetting medium in which to grind solid pigments. It is also a good plasticizer for cellulose acetate, cellulose nitrate, ethyl cellulose, di-benzyl cellulose and Glyceryl Phthalate resins. It is a good solvent for ester gum, Cumaron, Benzyl Acetate, vinyl and Cyclohexanone-formaldehyde resins. It is used widely in the perfumery industries as a solvent and fixative, as an alcohol denaturant, camphor substitute and in insecticidal sprays.



Phthalate Plasticizers

DINP



DINP is a high phthalate plasticizer. It is the widely used plasticizer around the globe. It has a wide range of indoor & outdoor applications. 95% of DINP is used as a plasticizer for flexible PVC used for construction & industrial applications, and durable goods (wire & cable, film and sheet, flooring, industrial hoses and tubing, footwear).

DOP



DOP is used in applications such as paints, lacquers, inks, adhesives, and sealants. Mainly in production of flexible PVC compounds, garden hose, gaskets and medical devices.

DPHP



DPHP is a C10 Plasticizer used in applications such as the production of artificial leather for automobiles, and for wire & cable coatings. DPHP boasts better UV stability compared to most general-purpose plasticizers, making it especially suitable for applications like roofing, geo membranes, or tarpaulins. Color stability and ageing performance are particularly good. DPHP often used as an alternative to Di-isodecyl Phthalate (DIDP) because only minor compound changes are needed to substitute with DPHP. It also similarly matches DIDP's performance in automotive applications.



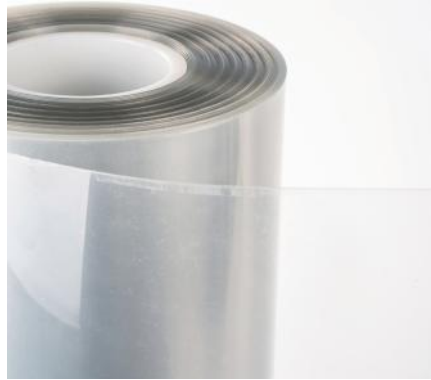
Phthalate-free Plasticizers

DEHCH



The plasticizer Eco-DEHCH Plasticizer is a modified version of DOTP and showing better efficiencies than any conventional non-phthalates. The product has much faster fusion speed similar to phthalates wherein it makes the production speed to be faster as well. Also, the lower surface migration can make your end product more durable and safer. DEHCH offers clear advantages, which are proved by our test results, and gives advantages as being phthalate-free with broad applications, such as flooring, wallpaper, compounding, sheet & film, hose, toy and medical applications.

DOA



DOA is used in the manufacturing of clear films for food packaging as known for its cold resistance. Additionally, it is compatible with nitrocellulose, ethyl cellulose, most synthetic rubbers, and high butyryl cellulose acetate butyrate. As a short chain ester, it is incorporated in the production of high-boiling, biodegradable, low-toxicity solvents and antiperspirants.

DOTP & R-DOTP



DOTP is a non-orthophthalate plasticizer and playing major role by substituting conventional phthalate. Di-octyl Terephthalate, DOTP, extensively used in applications like extrusion, calendaring, injection molding, rotational molding, dip molding, slush molding, coating and some ink applications besides in rubber. Also, this molecule is being used to produce Toy, Food-contact product to minimize the exposure of phthalate.

TOTM



TOTM is a lasting primary plasticizer with the good points of both polyester and monomer plasticizers. The compound is suitable for PVC, cellulose nitrate, ethyl cellulose and poly methyl methacrylate. With above average electrical properties, TOTM used in electrical wire and cable for 105 °C level applications. Other end uses include sealing gaskets and similar products. TOTM (Tri-2-ethylhexyl Trimellitate) used in the manufacture of appliance gaskets, automotive interiors, flexible medical tubing, flexible medical plastics, Polyvinyl chloride compounding, vinyl products, wire and cable insulation and other applications requiring a fire retardant, lasting primary plasticizer.



Secondary Plasticizers

CHLORINATED PARAFFINS



The use in applications for chlorinated paraffins range from extreme pressure additives in lubricants, to secondary plasticizers in paints and plastics, to flame retardants in various plastics and textiles. You can make a distinction between the chlorinated paraffins by the percentage of chlorine and the length of paraffin chains. Therefore, you receive them with a different average molecular weight and a proportion of chlorine, which varies from 30 up to 70%.

ESBO



Epoxidized Soybean Oil is mainly used as a plasticizer and stabilizer in plastic materials, especially PVC and its copolymers. Also used as a pigment dispersing agent and acid/mercaptan scavenging agent as well as an epoxy reactive diluent. Due to its low cost non-toxic and environmentally friendly properties, as well as its biodegradability over traditional phthalate plasticizers, ESBO is replacing dioctyl phthalate (DOP) in certain applications as natural plasticizer.

PROCESS OILS



Our process oils are genuine naphthenic oils produced to exact specifications and designed for a variety of processing applications. The different available grades have low pour points, good solvency power, low odor levels, excellent color and color stability characteristics. Process oils are used in wide range of different applications and mainly used as plasticizer in rubber & plastics. In PVC formulations many customers are able to use them in combination with the primary plasticizer like DOP or DOTP, not only to reduce the overall formulation cost but to get performance improvements besides better processing efficiency. If you need any support to select the right grade, please get in contact with us! The material is available from stock and delivered as IBC's or Tank.



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