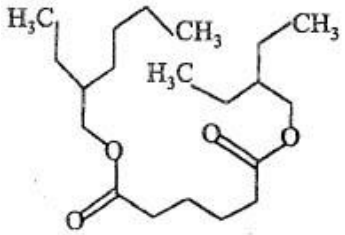
Formula
$C_{22}H_{42}O_4$

Molecular Weight
370

CAS registry number
103-23-1

Molecular Structure



Product Specifications	Value	Test Method
Specific Gravity @ 20°/20°C	0.924 - 925	ASTM D-4052
Ester content, % weight, minimum	99.5	ASTM D-1045
Acid Number, mg KOH/g, maximum	0.07	ASTM D-1045
Water,% by weight, maximum	0.1	ASTM E-203
Color, Pt-Co units (APHA), maximum	20	ASTM D-1209
Suspended matter	COLSFFM*	Visual

*Clear Oily Liquid Substantially Free of Foreign Material

Typical Physical Properties	
Apparent specific gravity @ 20°/20°C	0.927
Surface tension at 20°C in mN/m	30.0
Boiling range @ 6.7 mbar, °C	417
Pour point, °C	-76
Solubility @ 20°C in water, (g/lt.)	<0.01
Absolute viscosity @ 25°C, cP	13
Refractive index n_D 20	1.447
Flash point (COC), °C	82
Odor	Mild characteristic

*The properties value above are just for reference and not to be considered as guaranteed parameter.

Description

DOA (dioctyl adipate) is a light colored, oily liquid generally used as a plasticizer for PVC. It can be used alone or blended with other plasticizers such as DOP. In PVC, DOA features flexibility as low temperatures, good electrical properties, good resistance to weathering, and good stability to heat. DOA is used to produce clear films for food packaging applications.

In addition to PVC,DOA is compatible with nitrocellulose , ethyl cellulose, most synthetic rubbers,and high-butyryl cellulose acetate butyrates Payal DOA can also be used as a plasticizer and skin-conditioning agent in cosmetic and personal care applications.

Applications

DOA Plasticizer is more effective than Payal DOP Plasticizer in providing flexibility at low temperatures to vinyl products. Special application for DOA include its use in unfilled garden hose, In clear film where resistance to discoloration by long exposure to heat and ultraviolet light is important, and in food-wrap films. The superior solvency of DOA compared with DOP is an advantage in preparing vinyl dispersions with low initial viscosity and good viscosity stability.

DOA plasticizer is also compatible with nitrocellulose, ethyl cellulose, most synthetic rubbers, and high-butyryl cellulose acetate butyrates.

Safety

Avoid eye contact by wearing personal protective equipment Avoid repeated or prolonged skin contact. Avoid breathing vapors by providing adequate ventilation..

This data is based on technical Information available at the time of writing. However, they do not represent a specific guarantee on product performance and it is subject to change if required.