

Adimoll® DO

Adimoll® DO is a low-temperature-resistant plasticizer suitable for a large number of polymers, e.g. polyvinyl chloride (PVC), acrylonitrile-butadiene rubber (NBR), styrene-butadiene rubber (SBR) and polyvinyl acetate (PVAC).

Chemical composition:	di-2-ethyl hexyl adipate (DEHA)
CAS Reg. No.:	103-23-1
Supply form:	clear, low-viscosity liquid
Health and safety information:	Relevant safety data and advice and information on the necessary labeling can be found in Safety Data Sheet No. 031732.

Specified properties:

Property	Nominal value	Unit	Test method
Refractive index n_{D20}	1.4473 ± 0.0008	-	DIN 53 491
Acid value	max. 0.1	mg KOH/g	ISO 3682
Hazen color value	max. 40	-	ISO 6271
Water content	max. 0.1	%	DIN 51 777

Additional product information:

Property	Typical value	Unit	Test method
Density at 20 °C	approx. 0.925	g/cm ³	DIN 51 757
Viscosity at 20 °C	approx. 13	mPa s	DIN 53 015
Saponification number	approx. 305	mg KOH/g	DIN 53 401
Pour point	approx. -65	°C	ISO 3016
Flash point (open cup)	approx. 205	°C	ISO 2592
Dissolution temperature	approx. 146	°C	DIN 53 408 (based on this method)
Boiling point at 5 hPa	approx. 215	°C	DIN 53 171

PLASTIC ADDITIVES



Storage stability

If stored properly, the product keeps for 1 year.

Packaging

Road tankers, drums, contents 190 kg

Solubility

Soluble in all common solvents, insoluble in water.

These raw material properties are typical properties and, unless specifically indicated otherwise, are not to be considered as delivery specification.

Instructions and recommendations for use

Density, viscosity and vapor pressure, for example, are important variables determining storage, the design of the storage tanks and the dimensions of pipelines and delivery pumps. Figures 1, 2 and 3 show the values for these properties.

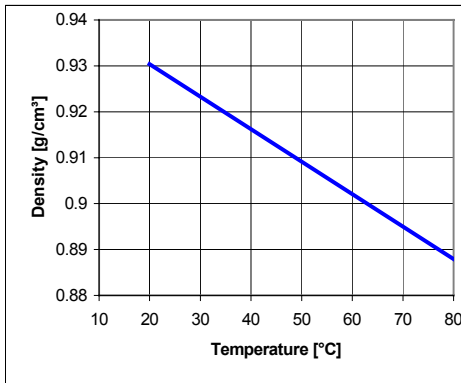


Fig. 1: Density of Adimoll DO as a function of temperature (DIN 51757)

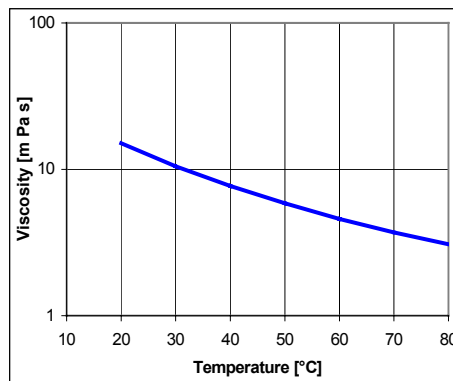


Fig. 2: Viscosity of Adimoll DO as a function of temperature (DIN 53015)

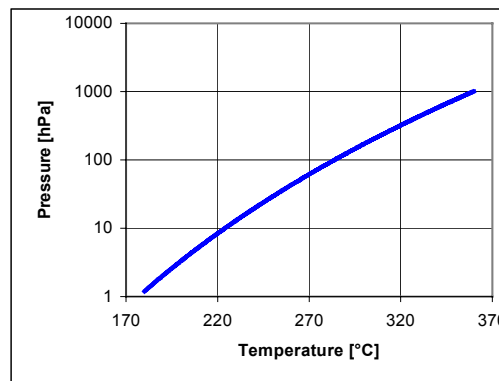


Fig. 3: Vapor pressure curve of Adimoll DO



General properties

Adimoll DO has

- a very good plasticizing effect when used with PVC, PVAC, NBR and other polymers.
- low viscosity, which, in combination with its weak ability to solvate PVC, has a positive effect on the initial viscosity and storage stability of plastisols.
- good compatibility with PVB resins and other plasticizers used in the manufacture of PVB film.
- good compatibility with a large number of polymers such as polyvinyl chloride (PVC), polyvinyl acetate (PVAC), acrylonitrile-butadiene rubber (NBR), styrene-butadiene rubber (SBR), chloroprene rubber (CR), ethylene-vinyl acetate rubber (EVM) and ethylene-propylene copolymers (EPM).

Applications

Adimoll DO imparts

- very good low-temperature resistance to suitably plasticized compounds; this effect is clearly noticeable even when Adimoll is used in combination with other plasticizers.
- very good light stability to PVC compounds.

Adimoll DO is used for a wide range of articles based on polyvinyl chloride (PVC), acrylonitrile-butadiene rubber (NBR), styrene-butadiene rubber (SBR), chloro-prene rubber (CR), ethylene-vinyl acetate rubber (EVM) and ethylene-propylene copolymers (EPM).

Adimoll DO is used when regulations and recommendations governing food contacting applications need to be met.

It is particularly beneficial to use Adimoll DO when very good low-temperature resistance and light stability are required, together with high elasticity.

Registered Trademarks of Lanxess Deutschland AG:

Adimoll

The above formulation is intended solely as a guide for our business partners and others interested in our products. As the conditions of use and application of the suggested formulation are beyond our control, it is imperative that it be tested to determine, to your satisfaction, whether it is suitable for your intended use(s) and application(s). This application-specific analysis at least must include testing to determine suitability from a technical, as well as health, safety and environmental standpoints. Further, although the ingredients, quantities thereof and properties of compounds or finished goods mentioned herein reflect our recommendation at the time of publication, this guide may not be subject to continuous review and/or updating, and you agree that use is undertaken at your sole risk. All information is given without warranty or guarantee, and it is expressly understood and agreed that you assume, and hereby expressly release us from, all liability, in tort, contract or otherwise, incurred in connection with the use of this guide.

This information and our technical advice - whether verbal, in writing or by the way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to check its validity and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

Lanxess, D-51369 Leverkusen
Functional Chemicals High Performance Additives Plastic Additives

PLASTIC ADDITIVES

