

Technical data sheet

DIPLAST[®] D/MG

Version: April 2015

Chemical composition

Bis (2-ethylhexyl) adipate;
Adipic acid, bis (2-ethylhexyl) ester;
Di-2-ethylhexyl adipate (DOA or DEHA)

CAS number

103-23-1

EINECS number

203-090-1

Specifications

Characteristics	Unit	Value	Test method	
Density at 20°C	g/ml	0.925 - 0.927	GM 012	ASTM D 4052-96
Refractive index n_D^{20}		1.446 - 1.448	GM 020	ASTM D 1045-95
Colour	Pt-Co	30 max.	PL02F	ASTM D 1045-95 ASTM D 1209-00
Acidity	mgKOH/g	0.08 max.	PL02C	ASTM D 1045-95
Water content	%	0.1 max.	GM 010	ASTM E 203-96
Ester content	%	99.5 min.	PL10C	G.C.
U.V. absorbance on aqueous extract		0.1 max.	PL03C	
Reducing substances on aqueous extract	ml	1.0 max.	PL05C	

DIPLAST[®] D/MG is an oily, limpid, anhydrous liquid with a characteristic odour. It is miscible with common organic solvents, immiscible with water and miscible with most of the plasticizers used in the processing of PVC.

The product **DIPLAST[®] D/MG** due to its nature does not have a shelf life. However it can be stored in appropriate containers at a temperature of approximately 25°C and the exclusion of humidity for at least 1 year, without losing its chemical properties.

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Characteristics and applications

With reference to the Commission Regulation (EU) N° 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food, **DIPLAST® D/MG**, being bis (2-ethylhexyl) adipate, is a substance listed in Annex I, table 1, of the Regulation (EU) N° 10/2011, REF N° 31920, FCM substance N° 207.

The above mentioned substance can be used as additive or aid to polymerisation with the following Restriction:

SML = 18 mg/Kg

DIPLAST® D/MG, being Adipic acid, bis (2-ethylhexyl) ester with high quality, is suggested by Polynt to produce articles intended to come into contact with foodstuffs.

General characteristics

Characteristics	Unit	Value	Test method	
Viscosity at 20°C	mPa·s	12	GM 022	ASTM D 445-96
Saponification number	mgKOH/g	304	PL08C	BS 4835
Volatility (6 hours at 100°C) (7 grams in 75 mm Petri dish)	%	0.05	PL07F	
Heavy metals content				
• Chromium	ppm	< 1		
• Barium	ppm	< 1		
• Tin	ppm	< 3		
• Lead	ppm	< 1		
• Cadmium	ppm	< 0.6		
• Copper	ppm	< 1		
Flash point	°C	192°C		

The figures above are typical values and are not intended as specification limits.

For further information on the characteristics and properties of **DIPLAST® D/MG** in the liquid state, see the relevant EC-standard Materials Safety Data Sheet.

The information contained here is correct and accurate and is based on our technical and scientific knowledge at the date of going to press.

Such information is, in all cases, relevant only with respect to the product as used in its pure state and only for the uses referred to in this publication.

Nothing stated here may be taken or construed as implying a breach of existing patents.

No warranty, either expressed or implicit, is given with regard to the results to be obtained from using this information.

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