



DI ISO NONYL ADIPATE (DINA)



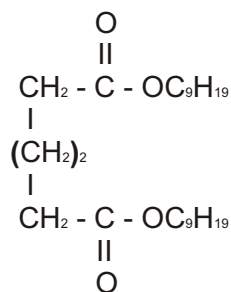
DI ISO NONYL ADIPATE (DINA)

Primary plasticizer for PVC and PVC copolymers

Chemical Nature

Adipic acid ester of C₉alcohol

Chemical Name	:-	DI-ISO NONYL ADIPATE
Trade Name	:-	DINA
Molecular Formula	:-	C ₂₄ H ₄₆ O ₄
Molecular Weight	:-	396
Molecular Structure	:-	(CH ₂) ₄ (COOC ₉ H ₁₉) ₂



CAS Number	:-	33703-08-01
UN. NO	:-	
EINECS NO	:-	291-426-8

Specification

Characteristics	Unit	Test Method	Value
Colour	HU	ASTM-D-1045-86	40 max.
Volatile Loss (130°C/3 Hrs)	wt. %	KLJTM	0.10 max.
Ester Value	mg KOH/g	ASTM-D-1045-86	278-284.
Acidity	wt. %	ASTM-D-1045-86	0.030 max.
Moisture	wt. %	ASTM-E-203	0.10 max.
Specific Gravity (27°C)	-	ASTM-D-1045-86	0.905 – 0.925.
Ester content	wt. %	ASTM-D-1045-86	99.50 min.
Heat Stability (180°C/2 Hrs)	HU	ISI-9591-96	50 HU.
Acidity after heat treatment	wt. %	ASTM-D-1045-86	0.05.
Plasticizing Esters by GC	%by area	KLJTM	99.50 min.

Typical Properties

Volume Resistivity	Ohmcm	KLJTM	4.5 ± 0.5 X 10 ¹¹
Boiling Point @ 5 mbar	°C	lit.	233.
Pour point	°C	lit.	-68.
Viscosity at 20°C	cp	KLJTM	20 -25.
Flash Point (COC)	°C	KLJTM	215.
Refractive Index (27°C)	-	ASTM-D-1045-86	1.440-1.460.

Total Solution in Plasticizers

KLJ Group

Trust built on performance



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Properties

DINA is clear oily liquid, free of foreign materials, does not dissolve in water, dissolves in organic solvents, like the chloroform, gasolene, ethyl acetate, methanol, toluene, mineral oil, vegetable oil, etc; slight soluble in ethylene glycol.

Application

DINA is a highly efficient plasticizers which imparts excellent low temperature flexibility and resistance to impact to the base resin. For these reasons it finds wide use in polymeric systems based on vinyl, nitrocellulose and rubber.

It is used as a carrier solvent for polyurethane system. It is soluble in the usual organic solvent and is miscible and compatible with all the monomeric plasticizers commonly used in vinyl.

Plasticizing Efficiency 1.10

Packing & Storage

DINA is packed in 200/225 kg iron drum / HDPE drum, 20 - 22 MT Flexi tank / ISO tank / road tanker. It is stored in tightly closed container, in a cool, dry, ventilated area.

Shelf Life

Original characteristics remain intact for 24 months, if kept in recommended storage.

Safety

The MSDS can be provided on request.

Disclaimer

The data contained in this publication are based on our current knowledge and experience. During processing, there are so many factors which may affect the application part of **DINA**, so these data neither imply any guarantee of certain properties, nor the suitability of the product for the specific purpose. Any data given in this publication may change without prior information and donot constitute the agreed quality of our product.

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