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DI-ISONONYL PHTHALATE (DINP)

PROPERTY:

DINP is a C9 phthalate plasticizer, appearing as a clear, colorless, and almost odourless oily liquid with solubility in most organic solvents. Compared with DOP, DINP typically requires a slightly higher dosage to achieve similar plasticizing efficiency. However, it offers superior electrical insulation, durability, migration resistance, and low-temperature flexibility. The longer carbon chain structure improves stability and reduces volatility. At the same Phr level, DINP-plasticized products generally demonstrate improved tensile strength, elongation, durability, and low-temperature flexibility than DOP-plasticized products.

APPLICATION:

DINP is an alternative to DOP, suitable for most flexible PVC products that use DOP. It is especially preferred for **automotive interior leather and accessories**, as its low volatility effectively reduces **windshield fogging**. In the wire and cable industry, manufacturers will replace DOP with DINP for **UL 60°C cable and wire insulation and sheathing** to enhance durability and aging resistance. Replacing DOP with DINP offers lower volumetric cost.

SPECIFICATION:

Item of Analysis	Unit	Value
Appearance		Transparent oil liquid
Color	APHA No. \leq	25
Acid Value	KOH-mg/g \leq	0.05
Water Content	Wt% \leq	0.1
Specific Gravity	20/20°C	0.975 \pm 0.0005
Ester Content	Wt% \geq	99.6

PACKING:

In iron drums, 200kg net weight per drum, total 80 drums (16MT) per 20' FCL, OR
In IBC tank, 950kg net weight per tank, total 20 tanks (19MT) per 20' FCL, OR
In flexibag, around 21-23MT per 20' FCL.

STORAGE/TRANSPORTATION:

If stored in tanks, purge N₂ to prevent moisture absorption.
If stored in drums, keep the container sealed when not in used.