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ISO 9000
REGISTERED

POLYCIZER® PE-330
Polymeric Plasticizer

Polycizer PE-330 is a medium molecular weight polyester plasticizer for use in rubber and plastic applications. Since Polycizer PE-330 is a polymeric type plasticizer, it will provide excellent permanency and non-extractability in those applications requiring these properties due to high temperature exposure and/or migration (extraction) conditions.

Polycizer PE-330 is recommended for use in PVC compounds as a permanent plasticizer for volatility resistance. It also provides excellent non-migratory properties for PVC compounds in contact with other substrates such as lacquer and enamel coatings, modified and unmodified polystyrene, and rubber based compounds and adhesives. Polycizer PE-330 also has excellent durability and non-fogging properties for use in PVC articles for automotive interiors. In rubber applications, Polycizer PE-330 has excellent compatibility in chlorinated and nitrile polymers for maximum permanence and retention of properties upon heat aging.

TYPICAL PROPERTIES

Appearance	Light Colored Liquid
Acid Value	0.7
Color, APHA	130
Moisture, %	0.05
Viscosity @ 25°C	5300 cstk
Viscosity @ 38°C	2300 cstk
Viscosity @ 99°C	190 cstk
Refractive Index, 25°C	1.466
Flash Point, °C	291
Specific Gravity, 25°/25°C	1.088

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(Continued)

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POLYCIZER® PE-330 (Continued)

COMPATIBILITY AND SOLUBILITY:

Polycizer PE-330 has good compatibility with PVC and PVC-PVA copolymers, nitrocellulose, cellulose acetate butyrate and propionate, chlorinated rubber and nitrile rubber. It has limited compatibility in ethyl cellulose, PVA, and polyvinyl butyral.

Polycizer PE-330 is completely soluble in esters, ketones, chlorinated hydrocarbons, methanol and higher alcohols. It has limited solubility or insolubility in ethylene glycol, glycerin, hexane, and water.

COMPARATIVE PERFORMANCE PROPERTIES IN PVC:

(with a Barium-Cadmium Stabilizer)

	<u>Polycizer PE-330</u>	<u>Polycizer DOP</u>
Plasticizer Level, phr	69.5 ⁽¹⁾	54
Shore A Hardness (10 secs.)	75	77
Low Temp. Flex, Tf, °C (135, 000 psi)	-17	-25
1% Ivory Soap, % Loss (70°C-24 hrs.)	4.8	4.5
Mineral Oil, % Loss (70°C-24 hrs.)	3.9	12.4
Hexane, % Loss (25°C-4 hrs.)	1.42	7.7
Carbon Volatility, % Loss (90°C-24 hrs.)	0.6	5.2
Rubber Migration, % Loss, Foam Rubber, (60°C-168 hrs. - 0.25 psi)	0.7	10.0
High Humidity Compatibility, 100% R.H., (95°C-68 hrs.)	Good	Excellent
Polystyrene Mar	Excellent	Poor

⁽¹⁾ To give about the same hardness as di-2-ethylhexyl phthalate (DOP).

SUGGESTED USE AREAS:

1. Because of low odor transfer, low taste, and good resistance to modified and unmodified polystyrene in PVC compounds, Polycizer PE-330 is used in gaskets for refrigerators, air conditioners, and other critical areas.
2. Polycizer PE-330 is used in electrical tapes and wall coverings which require excellent migration resistance to rubber based adhesives. Also, low volatility and good electrical properties make Polycizer PE-330 suitable for most electrical applications.
3. Polycizer PE-330 is used in high grade PVC upholstery sheeting requiring resistance to hydrocarbons and lacquer mar.
4. Because of soap and detergent resistance, Polycizer PE-330 is used in baby wear and hospital sheeting.
5. The low volatility of Polycizer PE-330 contributes to the high temperature post-cure cycle in DuPont Viton A formulations and improves the aging characteristics of chlorinated and nitrile elastomers.

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