

solutions for composites: internals

Polyester & Vinyl Ester

Peroxide Type / Group Classification	Product Name	Typical Application / Features	
MEKP Ketone Peroxide	MoldWiz® INT-DLP-22E	Improved release, minimizes build up. For resins and gel coats.	
	MoldWiz® INT-1515TBT	For clear or white gel coats; resin infusion.	
Perkadox® 16 (Akzo) Peroxydicarbonate TBPB Tertiary Butyl Perbenzoate Peroxyesters Triganox® C (Akzo) Two Tier Cures Peroxydicarbonates + Peroxyesters	MoldWiz® INT-PUL24	High performance internal release for most applications.	
	MoldWiz® INT-PUL34	Recommended for highly-filled ATH applications >40 or 50 phr.	
	MoldWiz® INT-PS125	Excellent for aramid in combination with VE resins	
	MoldWiz® INT-PUL524M	Low cost alternative to INT-PUL24.	
BPO Diacyl Peroxide	MoldWiz® INT-54		
	MoldWiz® INT-542WT		
	MoldWiz® INT-1854		
AAP	MoldWiz® INT-DLP-22E		
	MoldWiz® INT-1838P		
2, 4-Pentanedione Ketone Peroxide	MoldWiz® INT-15TBT		
	MoldWiz® INT-389A		
Dicumyl Peroxide Dialkyl Peroxides	MoldWiz® INT-PUL24		
Cumene Hydroperoxide Hydroperoxide	MoldWiz® INT-DLP-22E	Often used with thick-sectioned parts of vinyl ester resins.	
Lupersol® 231 (Atofina)	MoldWiz® INT-626HT	Rapid molding and prolonged shelf life. For	
Peroxyketals	MoldWiz® INT-EQ6	SMC and BMC.	



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Ероху

Typical loading level of MoldWiz $^{\circ}$ internal mold release in epoxy resin is 0.5% - 1.5% based on resin weight, and depending on the type of molding process. Resin formulations with higher filler loading generally require higher loadings of internal release.

Cure Type / Group Classification	Product Name	Typical Application / Features	
Aliphatic amines (Example: DETA)	MoldWiz® INT-1846N2	High performance. Works for most epoxies. Minimal to no impact on gel time.	
	MoldWiz® INT-1888LE	Neutralized to prevent acceleration of cure.	
	MoldWiz® INT-1850HT	For high temperature processing >350°F/167°C.	
Acid Anhydride & some aromatic & aliphatic amines	MoldWiz® INT-1888LS	For high Tg requirements.	
Cycloaliphatic amines (Example: PACM)	MoldWiz® INT-1846N2	For quick curing; filament winding.	
	MoldWiz® INT-1850HT	To quel carre, marrene many.	
Aromatic amines, MDA & non- MDA based	MoldWiz® INT-1857DC	High temperature cures >450°F/230°C.	
	MoldWiz® INT-1888LE		
Acid anhydride (Example: phthalic anhydride OR w/ tertiary amine or imidazole; MTHPA)	MoldWiz® INT-1888LE	High performance for anhydrides.	
	MoldWiz® INT-1324B	Excellent for balance of Tg, short beam shear, line speed, surface cosmetics, etc.	
	MoldWiz® INT-1846N2	General purpose for anhydrides.	
	MoldWiz® INT-1890M	Classic internal for anhydrides. Not for high temperature applications.	
Water-dispersable amines or polyamides	MoldWiz® INT-EP545(SL)	Good dispersion for epoxy emulsions; suitable for treating surface veils.	
DICY (imidazole accelerated)	MoldWiz® INT-1324	Pre-preg or wet systems.	
DICY with other amines	MoldWiz® INT-1324B		
	MoldWiz® INT-1888LE		



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Phenolics

Resin Type	Product Name	Typical Application / Features
Novolac Powdered, Hexa-cured	MoldWiz® INT-326PWD	Compression molding.
Novolac or Resol Liquid	MoldWiz® INT-1850HT MoldWiz® INT-PUL14	Pultrusion.
Resol Alcohol-based	MoldWiz® INT-12 MoldWiz® INT-1312MS	Phenolic laminates.
Resol Aqueous-based	MoldWiz® INT-1E-11S Series	Phenolic laminates.

Polyurethanes

Product Name	Typical Application / Features	
MoldWiz® INT-1230	General purpose release for foam or elastomers and non-aqueous in-mold coatings.	
MoldWiz® INT-120IMC	Release additive for in-mold coatings and polyureas.	
MoldWiz® INT-EPH19	Release additive for water-borne polyureas.	
MoldWiz® INT-1681OG	release for optical grade cast PU.	
MoldWiz® INT-1948MCH MoldWiz® INT-1968RAC	Release for PU pultrusion, primarily aromatic systems.	
MoldWiz® INT-1960MCH	Release for PU pultrusion, primarily aliphatic systems.	
MoldWiz® INT-1940RTM	Release additive for RTM, infusion, or other closed molded PU processes. Can also be used in pultrusion when no extension of gel time is desired.	

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