

## Ensinger Materials: Specifications and Standards

PRODUCT	RESIN SPEC	FDA	NSF	USDA	3A	USP Class VI	ASTM SHAPE SPEC
Tecaran ABS Nat	ASTM D-4673 ABS220B44500	21CFR 181.32	N	Y	Y		NONE
Tecaran ABS Blk	ASTM D-4673 ABS220B44500	N	N				NONE
Tecaform Acetal Nat BASF	ASTM-D-4181 POM211	21CFR 177.2470	Std. 14, 51, & 61	Y	Y	N	ASTM-D-6100 S-POM211
Tecaform Acetal Nat Celcon (C251 & M30AE)	ASTM-D-4181 POM211	21CFR 177.2470	Std. 61	Y	Y	N	ASTM-D-6100 S-POM211
Tecaform Acetal Blk BASF	ASTM-D-4181 POM211	21CFR 177.2470	Std. 14, 51, & 61	Y		N	ASTM-D-6100 S-POM211
Tecaform Acetal Blk Celcon	ASTM-D-4181 POM211	21CFR 177.2470	Std. 51 & 61	Y		N	ASTM-D-6100 S-POM211
Celcon M-25 Colors	ASTM-D-6778-02 POM211B55340	21CFR177.2470†; 21CFR178.3297‡	Std. 61	Y		Yes	ASTM-D-6100 S-POM211
Delrin II 150SA (discont.)	ASTM-D-4181 POM110B34330	21CFR 177.2480	Std. 61	Y	Y	N	ASTM-D-6100 S-POM111
Delrin 150 NC010 Nat	ASTM-D-4181 POM111	21CFR 177.2480	Std. 61	Y	Y	N	ASTM-D-6100 S-POM111
Delrin II 150E Blk	ASTM-D-4181 POM110B44330 LD25	N	N			N	ASTM-D-6100 S-POM111
Delrin II 150E Nat (discont.)	ASTM-D-4181 POM100B44PM{NI=1.20}20LD{EL=38}	N	N			N	ASTM-D-6100 S-POM111
Delrin 511P	ASTM-D-4181 POM112	21CFR177.2480	Std. 61	Y		N	
Delrin 500CL	ASTM-D-4181 POM112	N	N			N	
Delrin 100AF Blend	ASTM-D-4181 POM110L13A21220	N	Std. 61			N	ASTM-D-6100 S-POM0132
Delrin 100AF Full Strength	ASTM-D-4181 POM110L20A21220	N	Std. 61			N	ASTM-D-6100 S-POM0121
Delrin 500AF Blend	ASTM-D-4181 POM110L13A00000	N	Std. 61			N	ASTM-D-6100 S-POM0132
Delrin DE 588AF		N	N			N	ASTM-D-6100 S-POM0121
Delrin 570 GF20	ASTM-D-4181 POM110G20A29990, UM19, PM2.2, Y73, Z01	N	Std. 61			N	ASTM-D-6100 S-POM0100G201000000
Delrin 570 GF15	ASTM-D-4181 POM110G15A00000	N	Std. 61			N	ASTM-D-6100 S-POM0100G151000000
Delrin 507 BK601 Blk	ASTM-D-4181 POM132	N	N			N	NONE
Delrin 107 NC010 Nat	ASTM-D-4181 POM131	N	N			N	NONE
Tecaform HPV-13	ASTM-D-4181 POM110L13A00000	Yes; components	N	Y		N	ASTM-D-6100 S-POM0132
Tecaform SD	NONE	N	N				NONE
Noryl EN265-107 Black	ASTM D-4349 PPE220B50541, F13, G1106	N	N				NONE
Noryl EN265-8078 White	ASTM D-4349 PPE220B50541, F13, G1106	N	N				NONE
Noryl ENG265-701S Black		Y	Std. 61	Y			NONE
Noryl GF30	ASTM D-4349 PPE220G30A00000	N	N				NONE
Tecamid 6/6 Natural	ASTM-D-4066 PA0110B54220; L-P-410a Amend. 4 1" and under	21CFR177.1500	Std. 61	Y	Y		ASTM-D-5989 S-PA0111
Tecamid 6/6 Black	ASTM-D-4066 PA0110B54220	N	N				ASTM-D-5989 S-PA0111
Tecamid 6/6 MDS	ASTM-D-4066 PA0110L02A00000	N	N				ASTM-D-5989 S-PA0121
Tecamid 6/6 GF30	ASTM-D-4066 PA0110G30A00000	N	N				ASTM-D-5989 S-PA0101G3014444440
Tecamid 6/6 GF20	ASTM-D-4066 PA0110G20A00000	N	N				ASTM-D-5989 S-PA0101G2010000000
Tecamid 6/12	ASTM-D-4066 PA0613	N	N				ASTM-D-5989 S-PA0511
Tecamid 6/6 Black W.R.	ASTM-D-4066 PA0190; L-P-410 Weather Resist.	N	N				ASTM-D-5989 S-PA0141
Tecamid 6 GF30	ASTM-D-4066 PA0210G30A00000	N	N				ASTM-D-5989 S-PA0401G3010000000
Tecamid 6 GF13	ASTM-D-4066 PA0210G13A00000	N	N				ASTM-D-5989 S-PA0101G1310000000
Hydlar ZF	ASTM-D-4066 PA0110R30A00000	Yes; components	N	Y	Y		ASTM-D-5989 S-PA0101R3010000000
Tecamid ST801	ASTM-D-4066 PA0171	N	N				
Tecamid HS	ASTM-D-4066 PA0124	N	N				
Tecapeek Natural	MIL-P-46183 Ty. I Cl. 1	21CFR177.2415	N	Y	Y	No	ASTM-D-6262 S-PEAK0111
Tecapeek Black	NONE	N	N			N	ASTM-D-6262 S-PEAK0111
Tecapeek GF30	MIL-P-46183 Ty. II Cl. 3, excp. Elong.	N	N			N	ASTM-D-6262 S-PEAK0122
Tecapeek CF30	ASTM-D-4000 PAEK0000C30G85300	N	N			N	ASTM-D-6262 S-PEAK0133
Tecapeek PVX	ASTM-D-4000 PAEK0000R30D73200	N	N			N	ASTM-D-6262 S-PEAK0144
Tecadur PET Nat	ASTM D-5927 TPES0211	21CFR177.1630	N	Y	Y		ASTM-D-6261 S-TPES0211
Tecadur PET Black	ASTM D-5927 TPES0211 with black	N	N			N	ASTM-D-6261 S-TPES0211
Hydex 4101 PBT Natural	ASTM-D-5927 TPSE0111	21CFR177.1660	Std. 51 & 61	Y	Y		ASTM-D-6261 S-TPES0111
Hydex 4101 PBT Black	ASTM-D-5927 TPSE0111 with black	N	N			N	ASTM-D-6261 S-TPES0111
Hydex 4101L	NONE	Yes; components		Y	Y	N	ASTM-D-6261 S-TPES0120

PRODUCT	RESIN SPEC	FDA	NSF	USDA	3A	USP Class VI	ASTM SHAPE SPEC
Tecanat Natural	ASTM D-3935 PC0150B34740	21CFR 177.1580	Std. 51	Y	Y	Yes	ASTM-D-6098 S-PC0111
Tecanat Black	ASTM D-3935 PC0150B34740	21CFR 177.1580	Std. 51	Y		Yes	ASTM-D-6098 S-PC0111
Tecanat GF20 Natural	ASTM D-3935 PC0110G20A33230	N	N	N	N	N	ASTM-D-6098 S-PC0100G2010000000
Tecanat GF20 Black	ASTM D-3935 PC0110G20A00000	N	N	N	N	N	ASTM-D-6098 S-PC0100G2010000000
Tecanat GF10	ASTM-D-3935 PC0110G10A00000	N	N	N	N	N	ASTM-D-6098 S-PC0100G1010000000
Hydel PC-7	NONE	N	N			N	
Tecafine HDPE Natural	ASTM-D-4976 PE235	21CFR177.1520	N	Y	N	N	NONE
Tecafine PP Natural	ASTM D-4101 PP0210	21CFR177.1520	N	Y	N	Yes	NONE
Tecatron PPS Natural	ASTM-D-6358 PPS000B33050	N	N	N	N	N	NONE
Tecatron GF40 PPS (GmbH)	ASTM-D-6358 PPS011G40A00000 or ASTM-D-4067 PPS000A00000	N	N	N	N	N	NONE
Tecason P Radel R-5500	ASTM-D-6394 SP0311	21CFR176.170		Y		Yes	NONE
Hydex 301 transparent		N	N			N	NONE
Hydex 202 Opaque		N	Std. 61			N	NONE
Tecason S Polysulfone	ASTM D-6394 SP0112	21CFR177.1655	Std. 51 & 61	Y	Y	Y	NONE
Tecaflon PVDF	ASTM D-3222 Type II	21CFR177.2510	Std. 51 & 61	Y		N	ASTM-D-6713 S-PVDF0100
Ultem 1000-1000 Natural	ASTM D-5205 PEI0113	21CFR177.1595	Std. 51	Y		Yes	NONE
Ultem 1000-7101 Black	ASTM D-5205 PEI0113	N	N			N	NONE
Ultem 1000F Colors	ASTM-D-5205 PEI0110B98279, 103 Mpa, 194°C	21CFR177.1595†; 21CFR178.3297‡	Std. 51	Y		Yes	NONE
Ultem 2300 GF30 Natural	ASTM D-5205 PEI0110G30A96299, 159 Mpa, 224 Mpa, 208°C	N	Std. 51	N	N	N	NONE
Ultem 2300-7101 GF30 Black	ASTM D-5205 PEI0110G30A99299, 159 Mpa, 7586 Mpa, 200 Mpa, 208°C	N	Std. 52	N	N	N	NONE
Ultem 2300 GF30 Colors	ASTM D-5205 PEI0110G30A45253	N	Std. 53	N	N	N	NONE
Ultem 2200 GF20		N	Std. 51	N	N	N	NONE
Hydel PEI-7	NONE	N	N	N	N	N	NONE
Tecast Vekton 6PA Nat	L-P-410A, Amend. 4	Yes; components	N	Y	N	N	ASTM-D-5989 S-PA0210
Tecast Vekton 6PA Black	NONE	N	N	N	N	N	ASTM-D-5989 S-PA0200
Tecast Vekton 6PA Blue	NONE	N	N	N	N	N	ASTM-D-5989 S-PA0200
Tecast Vekton 6PA Orange	NONE	N	N	N	N	N	ASTM-D-5989 S-PA0200
Tecast Vekton 6PA Green	NONE	N	N	N	N	N	ASTM-D-5989 S-PA0200
Tecast Vekton 6PA Red	NONE	N	N	N	N	N	ASTM-D-5989 S-PA0200
Tecast Vekton 6PAL	NONE	N	N	N	N	N	ASTM-D-5989 S-PA0250
Tecast Vekton 6PAL Food	NONE	Yes; components	N	Y	N	N	ASTM-D-5989 S-PA0250
Tecast Vekton 6PALM	NONE	N	N	N	N	N	ASTM-D-5989 S-PA0200
Tecast Vekton 6PAM	NONE	N	N	N	N	N	ASTM-D-5989 S-PA0220
Tecast Vekton 6XAU	NONE	N	N	N	N	N	ASTM-D-5989 S-PA0200
Tecast Vekton 6PAG	NONE	N	N	N	N	N	ASTM-D-5989 S-PA0200
Sintimid V	NONE	N	N	N	N	N	NONE
Tecator 5013 (TLN)	ASTM-D-5204 PAI000	N	N	N	N	N	NONE
Tecator 5031 (TLB)	ASTM-D-5204 PAI000 or ASTM-D-5204 PAI022L15	N	N	N	N	N	NONE

† FDA callout for resin

‡ FDA callout for colorants

The information provided is current as of **NOV. 19, 2004** but is subject to change at any time. This information is only to assist you and is given without obligation or liability. If your specification is CRITICAL, please contact your ENSINGER-HYDE Technical Department for any updates.