



Americas: COMMERCIAL

LNP* Stat-kon* Compound DEP42E

Also known as: DCL-4542 EM Product Reorder Name: DEP42E

LNP STAT-KON* DEP42E is a compound based on Polycarbonate resin containing Carbon Fiber, Silicone, PTFE. Added features of this material include: Easy Molding.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	104	MPa	ASTM D 638
Tensile Strain, break	2	%	ASTM D 638
Tensile Modulus, 50 mm/min	8750	MPa	ASTM D 638
Flexural Stress	161	MPa	ASTM D 790
Flexural Modulus	7650	MPa	ASTM D 790
Tensile Stress, break	105	MPa	ISO 527
Tensile Strain, break	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	8580	MPa	ISO 527
Flexural Stress	160	MPa	ISO 178
Flexural Modulus	8600	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	526	J/m	ASTM D 4812
Izod Impact, notched, 23°C	81	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	12	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	26	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	145	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	141	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.25E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.43E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	3.25E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.43E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	146	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	142	°C	ISO 75/Af
DUNCTORI	Value	Unit	Standard
PHYSICAL	• • • • • • • • • • • • • • • • • • • •		
	1.32	g/cm³	ASTM D 792
Density	_	g/cm³	ASTM D 792 ASTM D 570
Density Moisture Absorption, 50% RH, 24 hrs	1.32	-	
Density Moisture Absorption, 50% RH, 24 hrs Mold Shrinkage, flow, 24 hrs	1.32 0.15	%	ASTM D 570
Density Moisture Absorption, 50% RH, 24 hrs Mold Shrinkage, flow, 24 hrs Mold Shrinkage, xflow, 24 hrs Mold Shrinkage, flow, 24 hrs	1.32 0.15 0.2	%	ASTM D 570 ASTM D 955
Density Moisture Absorption, 50% RH, 24 hrs Mold Shrinkage, flow, 24 hrs Mold Shrinkage, xflow, 24 hrs	1.32 0.15 0.2 0.5	% % %	ASTM D 570 ASTM D 955 ASTM D 955
Density Moisture Absorption, 50% RH, 24 hrs Mold Shrinkage, flow, 24 hrs Mold Shrinkage, xflow, 24 hrs Mold Shrinkage, flow, 24 hrs	1.32 0.15 0.2 0.5 0.19	% % % %	ASTM D 570 ASTM D 955 ASTM D 955 ISO 294

Source GMD, last updated:10/01/2004

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	305 - 325	°C
Front - Zone 3 Temperature	320 - 330	°C
Middle - Zone 2 Temperature	310 - 320	°C
Rear - Zone 1 Temperature	295 - 305	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:10/01/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

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- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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