Density

TER Plastics

DIATTE CHEMICAL

ABS		Lotte	e Chemical Corporation
Processing/Physical Characteristics ASTM Data	Value	Unit	Test Standard
Melt Flow Index	1.7	g/10min	ASTM D 1238
Temperature	200	°C	-
Load	5	kg	-
Mold Shrinkage, MD	0.003		ASTM D 955
Mold Shrinkage, TD	0.003	mm/mm	ASTM D 955
Density	1040	kg/m ³	ASTM D 792
Rheological properties	Value	Unit	Test Standard
ISO Data	0.0	%	100 004 4 0577
Molding shrinkage, parallel	0.3		ISO 294-4, 2577
Molding shrinkage, normal	0.3	%	ISO 294-4, 2577
Melt flow index, MFI	1.7	g/10min	ISO 1133
MFI temperature	200	°C	-
MFI load	5	kg	-
Mechanical properties	Value	Unit	Test Standard
ISO Data	0.100	145	100 507
Tensile Modulus	2400	MPa	ISO 527
Yield stress	41	MPa	ISO 527
Stress at break	35	MPa	ISO 527
Strain at break	14	%	ISO 527
Charpy notched impact strength, +23°C	28	kJ/m²	ISO 179/1eA
Flexural modulus, 23°C	2100	MPa	ISO 178
Flexural strength	59	MPa	ISO 178
Izod Impact notched, 23°C	24	kJ/m²	ISO 180/1A
Rockwell hardness	R 108	-	ISO 2039-2
ASTM Data			
Tensile Modulus	2000	MPa	ASTM D 638
Tensile Strength at Yield	40	MPa	ASTM D 638
Tensile Strength at Break	44	MPa	ASTM D 638
Elongation at Break	15	%	ASTM D 638
Flexural Modulus	2100	MPa	ASTM D 790
Flexural Strength	58	MPa	ASTM D 790
Rockwell Hardness	R 108	-	ASTM D 785
Izod Impact notched, 1/8 in	280	J/m	ASTM D 256
Izod Impact notched, 1/4 in	240	J/m	ASTM D 256
			T 101
Thermal properties ISO Data	Value	Unit	Test Standard
Temp. of deflection under load, 1.80 MPa	78	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	91	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	98	°C	ISO 306
ASTM Data		~	
DTUL @ 66 psi	95	°C	ASTM D 648
DTUL @ 264 psi	83	°C	ASTM D 648
Other properties ISO Data	Value	Unit	Test Standard

Created: 2025-03-15 Source: www.materialdatacenter.com

Our product information and suggestions are based on analyses, empirical values, and data from the product manufacturer in question and are therefore provided with our best knowledge and accountability. We do not, however, assume any liability or warranty, be it for defects in title, quality and suitability of the products for a specific purpose, or non-infringement of industrial property rights. We do not warrant the use or processing of the products and information, or consequences of any kind arising from product descriptions, suggestions, and recommendations. The responsibility for appropriate usage, as well as final suitability testing of the raw material is exclusively the responsibility of the customer as part of sampling/final qualification of a manufactured molded part. The specified data are only indicative and are not to be interpreted as legally binding specifications.

1040

kg/m³

ISO 1183

Starex SD-0150 U			
ABS			Lotte Chemical Corporation
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 80	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.05	%	-
Melt temperature	230 - 230	°C	-
Mold temperature	40 - 80	°C	-
Zone 1	160 - 180	°C	-
Zone 2	190 - 200	°C	-
Zone 3	210 - 220	°C	-
Nozzle temperature	230 - 230	°C	-
Screw speed	50 - 150	rpm	-
Injection pressure	49 - 150	MPa	-
Back pressure	0.5 - 2	MPa	-

Characteristics

Processing

Injection Molding

Delivery form Pellets, Natural Color

Created: 2025-03-15 Source: www.materialdatacenter.com

Page: 2/2

Page. 22 Our product information and suggestions are based on analyses, empirical values, and data from the product manufacturer in question and are therefore provided with our best knowledge and accountability. We do not, however, assume any liability or warranty, be it for defects in title, quality and suitability of the products for a specific purpose, or non-infringement of industrial property rights. We do not warrant the use or processing of the products and information, or consequences of any kind arising from product descriptions, suggestions, and recommendations. The responsibility for appropriate usage, as well as final suitability testing of the raw material is exclusively the responsibility of the customer as part of sampling/final qualification of a manufactured molded part. The specified data are only indicative and are not to be interpreted as legally binding proceifications. specifications.