

General product information

Elastollan® 1185 A 10F

® = registered trademark of BASF Polyurethanes GmbH

Elastollan 1185A10F is a polyether based TPU compound that includes a halogen-containing flame retardant. This product is targeted to be used in extrusion applications that include cable jacketing, film/sheet, hose/hose jacketing and profile extrusions. As is the case with other ether based Elastollan products, Elastollan 1185A10F exhibits excellent abrasion resistance, toughness, excellent low temperature properties and resistance to fungus and hydrolytic attack (high humidity and water contact) As with all TPU products, Elastollan® 1185A10F must be dried before processing. The drying step is required to maintain a low moisture content until the product enters the processing equipment. The water content must be less than 0.03% before and during processing. The typical drying conditions should be 2-4 hours @ 175°-195°F (80°-90°C). Elastollan® 1185A10F can be stored for up to 1 year in its original container. Containers should be stored in a cool and dry area.

Properties		Test Method	Typical Value	
			English	SI
Physical				
Specific Gravity	gr./cm ³	ASTM D-792	1.29	1.29
Hardness	Shore A	ASTM D-2240	87A	87A
MFI, g/10 min	190°C/8.7 kg	ASTM D-1238	20-40	20-40
Flame Rating		UL-94	V0 - .040" - .120"	V0 - 1-3mm
LOI	%	ASTM D-2863	30%	30%
Mechanical ⁽²⁾				
Tensile Strength (Ultimate)	psi / MPa	ASTM D-412	4200 psi	29 MPa
Tensile Stress	@100% Elong	ASTM D-412	1300 psi	9 MPa
Tensile Stress	@300% Elong	ASTM D-412	2500 psi	17 MPa
Elongation at Break	%	ASTM D-412	500%	500%
Compression Set, %	22 hrs @ 23°C	ASTM D-395 (B)	35%	35%
Compression Set, %	22 hrs @ 70°C	ASTM D-395 (B)	85%	85%
E-Modulus	psi / MPa	ASTM D-412	3000 psi	20 MPa
Flexural Modulus	psi / MPa	ASTM D-790	7000 psi	48 MPa
Tear Strength	lb./in. N/mm	ASTM D-624, Die C	550 lb./in.	96 N/m
Taber Abrasion Resistance / mg loss	1000 mgr./H-18	ASTM D-1044	96 mg	96 mg
Thermal				
Vicat Softening Point	° F/°C	ASTM D-1525	230 ° F	110 °C
Glass Transition Temperature	° F/°C	DSC	-20 ° F	- 28 °C
Processing Conditions, Extrusion			320 - 340 ° F	160 - 170 °C
Processing Conditions, Inj. Molding			300 - 330 ° F	150 - 165 °C

The above values are shown as typical values and should not be used as specifications.
Molded plaques 0.080" thick were cured 20 hours at 100 °C before testing

Caution: Contact with product dusts from regrinding operations may cause temporary irritation of the eyes and the respiratory tract. Use with local exhaust. Under hot melt processing conditions (170-230°C), wear personal protective equipment to prevent thermal burns.

First aid: Eyes-Flush eyes with flowing water at least 15 minutes. If irritation develops, consult a physician. Skin-Skin contact with hot melt may cause thermal burns. Call a physician immediately. Inhalation-If vapors generated from the hot melt process are inhaled, move to fresh air. Aid in breathing. If breathing difficulties develop, see a physician immediately.

In case of fire: Use water fog, foam, CO₂, or dry chemical extinguishing media. Firefighters should be equipped with self-contained breathing apparatus and turnout gear.

Disposal: Waste material, unused contents and empty containers must be disposed of in accordance with applicable local, state or federal regulations. Refer to our Material Safety Data Sheet for specific disposal instructions.

In case of chemical emergency: Call CHEMTREC day or night for assistance and information concerning spilled material, fire, exposure and other chemical accidents. 800-424-9300

Attention: This product is sold solely for use by industrial institutions. Refer to our Material Safety Data Sheet regarding safety, usage, applications, hazards, procedures and disposal of this product. Consult your supervisor for additional information.

No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or designs, data or information set forth or that the products designs, data or information may be used without infringing the intellectual property rights of others in no case shall the descriptions information, data or designs provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the descriptions, designs, data and information furnished by BASF hereunder are provided gratis and BASF assumes no obligation or liability for the description, designs data and information given or results obtained, all such being given and accepted at your risk.