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TECHNICAL DATA SHEET HDPE (high density polyethylene)

HDPE sheets feature high crack resistance, good impact strength at temperatures below zero; can be produced in variety of colors to suit specific customer requirements. UV stabilization can be provided.

		Unit	Test method, ISO	Values
Density		g/sm ³	1183	0,96
Yield stress		mPa	527	22
Tensile strength at break		%	527	700
Tensile strength at yield		%	527	32
Charpy notch impact strength	23°C	kJ/m ²	179/1epA	17
Charpy notch impact strength	-30°C	kJ/m ²	179/1epA	4
Flexural Modulus		mPa	178	1180
Heat deflection temperature ,(HDT)	0,45 mPa	°C	75-2Be	85
	1.80 mPa	°C	75-2Ae	43
Shore hardness	Method D		868	67
Vicat softening temperature	50H/120°C	°C	306/B120	84

All above values apply to thermoplastics immediately after extrusion, with no aging effect.

Operation temperature:

material of prolonged softening temperature up to 80°C; cooling down to -50°C is permitted.

Mechanical properties:

high impact resilience, low surface hardness and mechanical stiffness, low modulus of elasticity.

Electric properties:

good dielectric characteristics.

Weatherability: no UV resistance.

Chemical fastness:

high chemical inertness; no resistance to fats, oils.

Contact with food staff: permitted, biologically inert.

Processing methods:

- mechanical machining (cutting, sawing, drilling);
- laser cutting;
- molding;
- welding: electric resistance (contact), US, by gun, extruded bead;
- bending.

Scope of application:

automotive industry, wing flaps, automotive fuel tanks; machine building; electric engineering, ventilation shafts, tanks to transport and store meat / fish products (boxes, bins, containers) and chemical agents, cutting boards for meat, fish, etc, water pool basins, decorative pond basins, tanks for fish farming; septic tanks, pans; construction, packaging, manufacture of substrates, bottoms for handbags, rucksacks, cases, sun visors. Ideally good for different types of molding (e.g. manufacture of female molds for paving and face tiles, food trays, wing flaps, pans, bins). It can be also used in manufacture of geogrids, geomembranes, facing panels, roof and floor coverings, various casings/boots, trays, stands/supports, tubes, fittings, packages.

Form of delivery:

Thickness: up to 30 mm

Width: up to 2100 mm

Surface aspect: gloss