Product Data Sheet
Drake CryoDyn™ CT-200
Drake Plastics Extruded

Drake CryoDyn is a polyketone-based polymer that is suitable to perform in aggressive cryogenic sealing environments.

- Dynamic and static sealing applications at ultra-low temperatures
- Excellent chemical resistance and wear properties
- Performance from cryogenic to 220° C / 428° F +
- Valve seats & seals, shaft components, back up rings, compressor components

Material Notes: *Made exclusively from Victrex CT™ 200 resin. Full batch/run traceability and MTR included with every order.*

Physical Properties	**Metric**	**English**	**Methods**
Specific Gravity	1.40	1.40	ASTM D792
Mechanical Properties*			
Hardness, Shore D		81	ASTM D2240
Tensile Strength, 23°C	73 MPa	10,600 psi	ASTM D638
Tensile Strength, -196°C	138 MPa	20,000 psi	ASTM D638
Elongation at Break**	10-40%	10-40%	ASTM D638
Flexural Strength, 23°C	121 MPa	17,600 psi	ASTM D790
Flexural Strength, -196°C	349 MPa	50,600 psi	ASTM D790
Flexural Modulus, 23°C	3.2 GPa	452,000 psi	ASTM D790
Flexural Modulus, -196°C	4.9 GPa	705,000 psi	ASTM D790
Compressive Strength, 23°C	117 MPa	17,000 psi	10% Def.; ASTM D695
Compressive Strength, -196°C	250 MPa	36,300 psi	ASTM D695
Izod Impact (notched)	36.8 J/M	0.7 ft*lbs/in	ASTM D256 Type A
Thermal Properties			
Glass Transition - °Tg	150°C	302°F	ASTM D3418
CLTE, 23°C	56.0 ppm/°C	31.1 ppm/°F	E831 TMA
CLTE, -165°C	65.0 ppm/°C	36.1 ppm/°F	DIN 51909
Thermal Conductivity, 23°C	0.25 W/m*K	1.73 Btu*in/hr*ft^2*°F	ASTM F433
Thermal Conductivity, -165°C	0.15 W/m*K	1.04 Btu*in/hr*ft^2*°F	ASTM F433

*The mechanical properties of extruded shapes may differ from the values published by resin producers. Published resin data is always generated from injection molded test specimens produced under ideal conditions.
Drake's extruded shape values are generated using specimens machined from actual shapes and may reflect surface imperfections from machining, the lack of cured surfaces on our specimens (PAI), different specimen sizes, different flow profiles, and molecular weight increases from our processes which enhance toughness and elongation.
**Elongation properties are dependent on crystallization and vary by manufacturing methods & cooling rates.