

Inject molding instruction

EN 1.0

Product characteristics

ZX-410V7T is a fibre-reinforced, tribological optimized compound with very small expansion coefficients.

Physical forms and storing

ZX-410V7T granules are available both in bags (5, 10, 25 kg) and in octabins (500 kg). The bulk density is between 0,7 and 0,8 kg/dm³. Undamaged packaging of ZX-410V7T can be unlimited stored.

Safety precautions

When the material is properly handled, no adverse health hazardous effects have to be expected. If the temperature limits (maximum 390°C) are met, there are no harmful fumes. The high temperatures during processing of ZX-410V7T require extra care when handling injection moulding parts. Degraded material must be removed by a purging mechanism at reduced cylinder temperature. By a rapid cooling of the decomposed material, e.g. in water bath, unpleasant odours can be prevented. The decomposed material must be pumped away, otherwise it can build up an increased gas pressure in the cylinder. When pumping, deflagrations might occurred. ZX-410V7T decomposes at an excessive thermal stress. This can result in gaseous decomposition products. The disassembly of the plasticizing unit must take place only at a cooled state. When processing ZX-410V7T make sure that the allowable dust limit value (e.g. "MAK-Wert-Richtlinien" (MAK-value-guidelines) in Germany) is not exceed. A sufficient workplace ventilation is be ensured.

Injection moulding

ZX-410V7T can be processed on all conventional injection moulding machines, taking into account that the correct set-up of the plasticizing unit and the mould temperature control is important. Long residence times at high temperatures should be avoided. For long pause periods, the cylinder temperature can be reduced to 250-280°C. When starting

and stopping of the machine should be set first an uniform temperature in the lower working range (340-350°C). Then, when steady state is reached, the material can be pumped out from the barrel. Eventually the required processing temperature can be set or you can turn off the heaters.

Note

These information reflect our current knowledge and inform you about our products and their application of usage. We can not guarantee an particular properties of the end products or their suitability for a particular application. Existing commercial patents must be observed. The quality of our products is warranted under the terms of our General Conditions of Sale. If case of doubts please contact our technical department.

Material- / machine data

Product characteristics

Properties	Unit	Test method	Values
Materialcode	-	-	A4T
Colour	-	-	Black
Density	kg / dm ³	ISO 1183	1,42
Schüttdichte	kg / dm ³	internal standard	0,8
Melt volume rate MVR 337°C / 6,7 kg	cm ³ / 10 min	ISO 1133	3-5

Shrinkage

Molding shrinkage (parallel)	%	ISO 2577, 294-4	0,03
Molding shrinkage (normal)	%	ISO 2577, 294-4	0,09

Drying

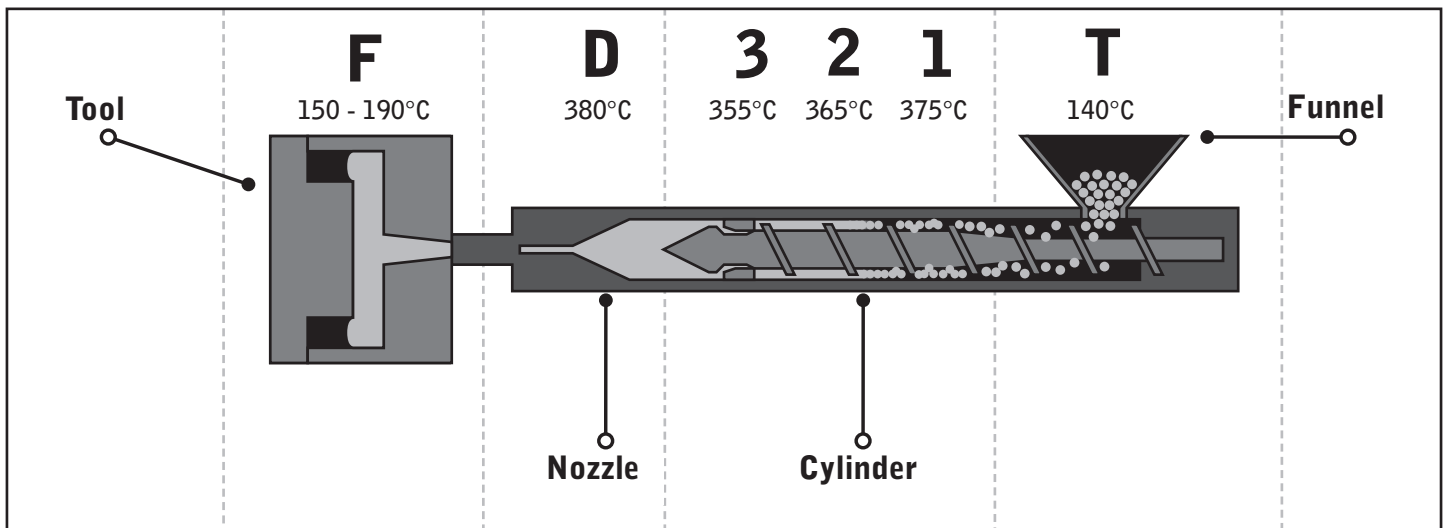
Moisture, max.	%	-	0,01
Dryer temperature (Dry air dryer or vacuum dryer) T	°C	-	140
Drying time	h	-	4

Injection molding

Melt temperature range	°C	-	350 - 390
Melt temperature (optimal)	°C	-	375
Mold temperature range F	°C	-	150 - 190
Mold temperature (optimal) F	°C	-	170

Machine Settings

Temperature hopper throat	°C	-	80
Cylinder temperature 1 (feed zone)	°C	-	375
Cylinder temperature 2 (compression)	°C	-	365
Cylinder temperature 3 (metering-zone, in front of the screw)	°C	-	355
Cylinder temperature D (nozzle)	°C	-	380
Peripheral screw speed	m/s	-	0,13



Address

Heisenbergstr. 63-65
Industriegebiet II
50169 Kerpen-Türnich
Germany

Contact

E-Mail: info@zedex.de
Internet: www.zedex.de
Phone: +49 2237 9749-0
Telefax: +49 2237 9749-20

Technical support

Martin Otten
Phone: +49 2237 9749-26
Telefax: +49 2237 9749-20
E-Mail: app@zedex.de