



V2 POLYMERS

Innovative Materials Suppliers

TECHNICAL DATA SHEET

V-FLEX 30A VK 2727

Technical Data Sheet status: Provisional

PROPERTIES	UNITS	STANDARDS	AVERAGE VALUES
Hardness	Shore A	ASTM D2240	30 \pm 3
Tensile strength at break <ul style="list-style-type: none">Flow DirectionCross Direction	MPa	ASTM D412	2.5 \leq 2.5 \leq
Elongation at break <ul style="list-style-type: none">Flow DirectionCross Direction	%	ASTM D412	400 \leq 400 \leq
Tear strength <ul style="list-style-type: none">Flow DirectionCross Direction	kN/m	ASTM D624	18 \leq 18 \leq

• ROHS Compliance

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith is believed to be accurate. However, conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that V2 polymers products are safe, effective, and fully satisfactory for intended end use.

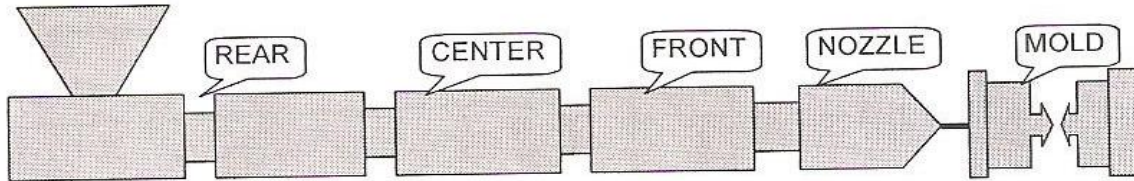
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INJECTION MOLDING GUIDE



TEMPERATURE	REAR	CENTER	FRONT	NOZZLE	MOLD
°C	160 to 180	170 to 190	180 to 205	190 to 220	20 - 50

Injection Pressure

Injection Rate

Pack Time

Hold Time

Predrying

Low to Medium

Medium to Fast

3-6 SEC

5-8 SEC

70°C/30mins

TROUBLE SHOOTING FOR MOLDING.

PROBLEM	SOLUTIONS														Apply solution in the order presented.	
Short Shots	16	02	03	30	09	21	10	11	28	27	29	33	07			
Surface Defects	31	11	02	03	21	10	25	07	12							
Sink Marks	02	05	12	28	27	29	31	16	06	08	07	04				
Voids	02	05	12	28	27	29	31	11	06	16	25	33				
Warping	24	02	11	06	37	13	14	08								
Burns/Part Discoloration	12	33	13	30	34	25										
Excessive Flash	12	01	15	34	32	25	14	13								
Bad Weld or Knit Lines	02	05	11	34	33	30	12	37	03	21						
Oversized Parts	12	15	14	13	11	20	21									
Undersized Parts	07	05	06	21	04	10	16	03	11	28	27					
Brittleness	13	18	17	22	26	25	11									
Blisters	25	13	12	17	33	22										
Shear Burning	18	12	15	35	33	27	28									
Overheated Stock	19	13	18	17	06											
Cold Slugs	28	12	09													
Poor Physical Properties	21	30	02	09	11											

SOLUTIONS NUMBER REFERENCE

01 Increase clamp pressure	14 Reduce holding pressure	27 Increase runner size
02 Increase injection pressure	15 Reduce injection pressure	28 Increase gate size
03 Increase injection speed	16 Increase amount of material	29 Increase sprue size
04 Increase injection time	17 Reduce screw speed	30 Increase size
05 Increase injection hold time	18 Reduce back pressure	31 Relocate gates at heavy cross – sections
06 Reduce mold temperature	19 Reduce nozzle temperature	32 Insure mold faces fit correctly
07 Increase holding pressure	20 Reduce cycle time	33 Clean vents
08 Increase cooling time	21 Increase material temperature	34 Inspect/clean mold surfaces
09 Increase nozzle temperature	22 Inspect material contamination	35 Clean/polish runners
10 Increase back pressure	23 Inspect blocked cooling channels	36 Clean nozzle
11 Increase Mold Temperature	24 Inspect uneven mold temperature	37 Relocate gates
12 Reduce injection speed	25 Dry material	38 Redesign ejection mechanism
13 Reduce cylinder temperature	26 Reduce regrind if used	



V2 POLYMERS

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TECHNICAL DATA SHEET

V-FLEX 40A NAT 2429D

Technical Data Sheet status: Provisional

Market: Household, Automotive, Industrial

Application: Grips, Seals, Soft Touch, handle grips

Features: Good bonding with PP, General purpose elastomer

PROPERTIES	UNITS	STANDARDS	AVERAGE VALUES
Hardness	Shore A	ASTM D2240	40 \pm 3
Molding Shrinkage	%	ASTM D955	1.0 to 1.7
Tensile strength at break <ul style="list-style-type: none">Flow DirectionCross Direction	MPa	ASTM D412	2.5 \leq 2.5 \leq
Elongation at break <ul style="list-style-type: none">Flow DirectionCross Direction	%	ASTM D412	400 \leq 400 \leq
Tear strength <ul style="list-style-type: none">Flow DirectionCross Direction	kN/m	ASTM D624	20 \leq 20 \leq

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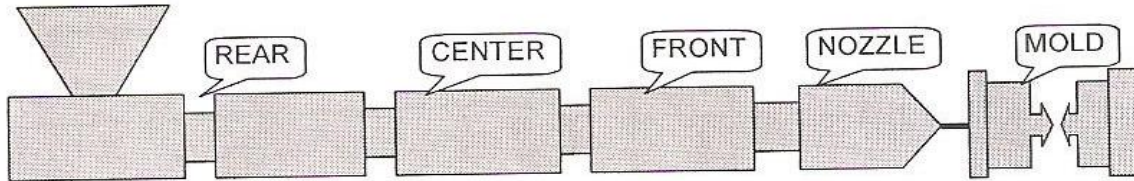
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INJECTION MOLDING GUIDE



TEMPERATURE	REAR	CENTER	FRONT	NOZZLE	MOLD
°C	160 to 180	170 to 190	180 to 205	190 to 220	20 - 50

Injection Pressure

Injection Rate

Pack Time

Hold Time

Predrying

Low to Medium

Medium to Fast

3-6 SEC

5-8 SEC

70°C/30mins

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V2 POLYMERS

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TECHNICAL DATA SHEET

V-FLEX 45A VK 2744

Technical Data Sheet status: Provisional

Market: Agriculture, Automotive, Industrial

Application: Seals, Gaskets, PP Insert Moulding, Injection Moulding/Extrusion

Features: Good Sealing property, UV Stability

PROPERTIES	UNITS	STANDARDS	AVERAGE VALUES
Hardness	Shore A	ASTM D2240	45 \pm 5
Specific Gravity		ASTM D792	1.00 \pm 0.02
Molding Shrinkage	%	ASTM D955	1.0 to 1.7
Tensile strength at break <ul style="list-style-type: none">Cross Direction	MPa	ASTM D412	4 \leq
Elongation at break <ul style="list-style-type: none">Cross Direction	%	ASTM D412	500 \leq
Tear strength <ul style="list-style-type: none">Cross Direction	kN/m	ASTM D624	30 \leq

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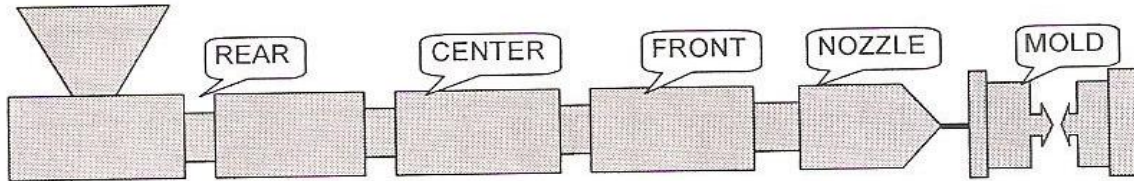
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INJECTION MOLDING GUIDE



TEMPERATURE	REAR	CENTER	FRONT	NOZZLE	MOLD
°C	160 to 180	170 to 190	180 to 205	190 to 220	20 - 50

Injection Pressure

Injection Rate

Pack Time

Hold Time

Predrying

Low to Medium

Medium to Fast

3-6 SEC

5-8 SEC

70°C/30mins

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V2 POLYMERS

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TECHNICAL DATA SHEET

V-FLEX 50A VK 2719

Technical Data Sheet status: Provisional

PROPERTIES	UNITS	STANDARDS	AVERAGE VALUES
Hardness	Shore A	ASTM D2240	50 \pm 3
Specific Gravity		ASTM D792	1.10 \pm 0.02
Molding Shrinkage	%	ASTM D955	1.0 to 1.7
Tensile strength at break <ul style="list-style-type: none">Flow DirectionCross Direction	MPa	ASTM D412	3.0 \leq 3.0 \leq
Elongation at break <ul style="list-style-type: none">Flow DirectionCross Direction	%	ASTM D412	550 \leq 550 \leq
Tear strength <ul style="list-style-type: none">Flow DirectionCross Direction	kN/m	ASTM D624	20 \leq 20 \leq

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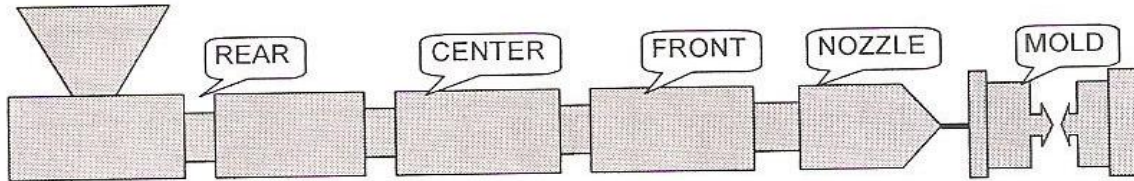
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