

# ILPEAFLEX®

TPE - SEBS compounds



## INDUSTRIE ILPEA

- STANDARD GRADES
- SPECIAL GRADES
- EASY HOT PLATE WELDING GRADES
- HIGH PERFORMANCE GRADES

# ILPEAFLEX®

TPE - SEBS compounds, PRODUCT RANGE  
THERMOPLASTIC ELASTOMERS

## STANDARD GRADES

### ILPEAFLEX S A45 - 21 SD

SEBS - Thermoplastic Elastomer Compound (TPE)  
standard grade, hardness ShA 45, suitable for  
injection moulding and extrusion

### ILPEAFLEX S A50 - 21 SD

SEBS - Thermoplastic Elastomer Compound (TPE)  
standard grade, hardness ShA 50, suitable for  
injection moulding and extrusion

### ILPEAFLEX S A55 - 21 SD

SEBS - Thermoplastic Elastomer Compound (TPE)  
standard grade, hardness ShA 55, suitable for  
injection moulding and extrusion

### ILPEAFLEX S A60 - 21 SD

SEBS - Thermoplastic Elastomer Compound (TPE)  
standard grade, hardness ShA 60, suitable for  
injection moulding and extrusion

### ILPEAFLEX S A65 - 21 SD

SEBS - Thermoplastic Elastomer Compound (TPE)  
standard grade, hardness ShA 65, suitable for  
injection moulding and extrusion

### ILPEAFLEX S A70 - 21 SD

SEBS - Thermoplastic Elastomer Compound (TPE)  
standard grade, hardness ShA 70, suitable for  
injection moulding and extrusion

### ILPEAFLEX S A76 - 00 SD

SEBS - Thermoplastic Elastomer Compound (TPE)  
low filler content, hardness ShA 76, suitable for  
injection moulding and extrusion

### ILPEAFLEX S D29 - 21 SD

SEBS - Thermoplastic Elastomer Compound (TPE)  
hardness SHD 29 and high stiffness, suitable for  
injection moulding and extrusion



## UV STABILIZED GRADES

### ILPEAFLEX S A60 - 21 UV

SEBS - Thermoplastic Elastomer Compound (TPE)  
UV stabilized grade, hardness ShA 60, suitable  
for injection moulding and extrusion

### ILPEAFLEX S A70 - 21 UV

SEBS - Thermoplastic Elastomer Compound (TPE)  
UV stabilized grade, hardness ShA 70, suitable  
for injection moulding and extrusion

### ILPEAFLEX S A80 - 88 UV

SEBS - Thermoplastic Elastomer Compound (TPE)  
UV stabilized, unfilled grade, hardness ShA 80,  
suitable for injection moulding and extrusion

### ILPEAFLEX S A90 - 23 UV

SEBS - Thermoplastic Elastomer Compound (TPE)  
UV stabilized grade, hardness ShA 90, suitable  
for injection moulding and extrusion

### ILPEAFLEX S D40 - 90 UV

SEBS - Thermoplastic Elastomer Compound (TPE)  
UV stabilized, unfilled grade, hardness SHD 40,  
suitable for injection moulding and extrusion

## EASY HOT PLATE WELDING

### ILPEAFLEX S A58 - 23 WD

SEBS - Thermoplastic Elastomer Compound (TPE)  
easy hot plate welding, hardness ShA 58,  
suitable for injection moulding and extrusion

### ILPEAFLEX S A62 - 21 WD

SEBS - Thermoplastic Elastomer Compound (TPE)  
easy hot plate welding, hardness ShA 62,  
suitable for injection moulding and extrusion

### ILPEAFLEX S A65 - 21 WD

SEBS - Thermoplastic Elastomer Compound (TPE)  
easy hot plate welding, hardness ShA 65,  
suitable for injection moulding and extrusion

### ILPEAFLEX S A70 - 23 WD

SEBS - Thermoplastic Elastomer Compound (TPE)  
easy hot plate welding, hardness ShA 70,  
suitable for injection moulding and extrusion

### ILPEAFLEX S A75 - 21 WD

SEBS - Thermoplastic Elastomer Compound (TPE)  
easy hot plate welding, hardness ShA 75,  
suitable for injection moulding and extrusion

## HIGH TEMPERATURE GRADES

### ILPEAFLEX S A35 - 94 HT

SEBS - Thermoplastic Elastomer Compound (TPE)  
high temperature unfilled grade, hardness ShA  
35, suitable for injection moulding and extrusion

### ILPEAFLEX S A38 - 91 HT

SEBS - Thermoplastic Elastomer Compound (TPE)  
high temperature unfilled grade, hardness ShA  
38, suitable for injection moulding and extrusion

### ILPEAFLEX S A43 - 21 HT

SEBS - Thermoplastic Elastomer Compound (TPE)  
high temperature grade, hardness ShA 43,  
suitable for injection moulding and extrusion

### ILPEAFLEX S A50 - 94 HT

SEBS - Thermoplastic Elastomer Compound (TPE)  
high temperature unfilled grade, hardness ShA  
50, suitable for injection moulding and extrusion

### ILPEAFLEX S A60 - 94 HT

SEBS - Thermoplastic Elastomer Compound (TPE)  
high temperature unfilled grade, hardness ShA  
60, suitable for injection moulding and extrusion

## FLAME RETARDANT GRADES

### ILPEAFLEX S A35 - 00 FR

SEBS - Thermoplastic Elastomer Compound (TPE)  
unfilled, flame retardant UL94-V2, ShA 35,  
suitable for injection moulding and extrusion

## LUBRIFIED SURFACE GRADES

### ILPEAFLEX S A70 - 20 LS

SEBS - Thermoplastic Elastomer Compound (TPE)  
highly lubricated, dust repellent surface, ShA 70,  
suitable for injection moulding and extrusion



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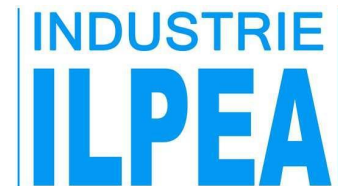
# ILPEAFLEX S - TECHNICAL DATA

## TPE – SEBS compounds

Available in all colours.

Process: injection moulding and extrusion

Application: general purpose, special and high performance



Compliant to: 2011/65/EU directive (RoHS); 1907/2006 regulation (REACH): annex XIV (SVHC)

Products	SD								UV					WD					HT					FR	LS						
	standard grades								UV stabilized					hot plate welding					high temperature					flame retardant	lubrified						
HARDNESS (Shore A)	45	50	55	60	65	70	76	D29	60	70	80	90	D40	58	62	65	70	75	35	38	43	50	60	35	70						
Product Name	A45 - 21 SD	A50 - 21 SD	A55 - 21 SD	A60 - 21 SD	A65 - 21 SD	A70 - 21 SD	A76 - 00 SD	D29 - 21 SD	A60 - 21 UV	A70 - 21 UV	A80 - 88 UV	A90 - 23 UV	D40 - 90 UV	A58 - 23 WD	A62 - 21 WD	A65 - 21 WD	A70 - 23 WD	A75 - 21 WD	A35 - 94 HT	A38 - 91 HT	A43 - 21 HT	A50 - 94 HT	A60 - 94 HT	A35 - 00 FR	A70 - 20 LS						
Compliant to: 2011/65/EU directive (RoHS); 1907/2006 regulation (REACH): annex XIV (SVHC)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
improved compression set performance																			X	X	X	X	X								
Lubricated surface																									X						
Flame Retardant																								X							
Hot plate welding		X		X	X	X								XX	X	X	X	X													
Overmoulding			X						XX	XX	X																				
<b>Base properties</b>	<b>Standard</b>	<b>Unità</b>																													
Density	ISO 1183	g/cm <sup>3</sup>	1,21	1,21	1,21	1,21	1,21	1,21	1,00	1,21	1,21	0,88	1,23	0,90	1,23	1,21	1,21	1,23	1,21	0,94	0,91	1,21	0,94	0,94	1,00	1,20					
Melt Flow Index	ISO 1133	g/10'							5																						
<b>Mechanical properties</b>	<b>Standard</b>	<b>Unità</b>																													
Shore A Hardness	ISO 868	ShA 4mm @3s	47	52	57	62	67	72	78						62	72	82	92						37	40	45	52	62	37	72	
Shore A Hardness	ISO 868	ShA 4mm @15s	45	50	55	60	65	70	76						60	70	80	90						35	38	43	50	60	35	70	
Shore D Hardness	ISO 868	ShD 4mm @3s												29																	
Tensile strength	ISO 37	N/mm <sup>2</sup>	4,0	5,5	6,5	7,0	8,5	9,5	9,6	13,0	7,5	9,0	11,0	12,5						7,0	7,5	8,5	8,5	9,5	9,1	9,5	11	11	11	3	9,0
Elongation at break	ISO 37	%	590	650	750	750	750	840	850	750	750	850	850						720	720	750	700	780	811	1000	780	770	760	450	710	
Tear Strength	ISO 34-1	N/mm <sup>2</sup>																							7,3						
Tensile set	ISO 2285	%																							9,5						
<b>Thermal properties</b>	<b>Standard</b>	<b>Unità</b>																													
Compression set	ISO 815	% 22h @23°C-Method B	18	20	19	20	27	22	25						20	22	29			28	20	21	22	28							28
Compression set	ISO 815	% 22h @40°C-Method B	22	23	22	26	42	30	30						23	30	34			55	36	30	37	44							34
Compression set	ISO 815	% 22h @60°C-Method B	30	30	31	39	52	45	41						32	45	54			70	47	48	65	60							47
Compression set	ISO 815	% 22h @100°-Method B																							45	42	44	45	45		
<b>Flame resistance</b>	<b>Standard</b>	<b>Unità</b>																													
Flammability	UL94																													V2	
<b>Processing</b>	<b>Unità</b>																														
Extrusion process		X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Injection molding process							X	X		X	X	X	X	X						X	X	X	X	X	X	X	X	X	X		
Drying temperature	°C	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	200-230	200-235	200-240	200-240	200-245	180-220	190-230
Drying time	h	4	4	4	4	4	4	4	4	4	4	210-240	210-240	210-240	4	4	4	4	4	4	4	4	4	4						6	4
Melt temperature	°C	180-210	180-210	185-215	190-220	190-225	190-230	190-230	195-235	190-220	190-230	210-240	210-240	210-240	190-220	190-225	190-225	190-230	190-230	200-230	200-235	200-240	200-240	200-245						180-220	190-230
Mold temperature	°C						40	40		40	40	40	40	40						50	50	50	50	50							
<b>Overmoulding / Welding</b>																															
EVA		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PE		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PP		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TPV		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							

This document contains information based on average values as obtained from the laboratory tests and observations made on our products in natural colour.

Tested materials were injection molded and conditioned in compliance with Standard ASTM D 618, procedure A. The reported values refer to our best technical knowledge at the moment of testing and cannot be used as a basis for the development of applications. For a better assessment of the materials, you are kindly requested to contact our technical or commercial offices, which are at your disposal and will supply detailed information on the most suitable characteristics for their intended use.

With reference to DPR n.224 dated May 24, 1988, issued in accordance with EC Guide-lines 85/374, ILPEA declines all responsibility arising from an improper use of the products described in this document.