





KLJ GROUP
SINCE 1967

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... sustaining life with natural footprints

www.kljindia.com

TOTAL SOLUTION IN FOOTWEAR COMPOUNDS



World Class Plants strategically located in India with installed capacity of Compounding ggregating over 200,000 tpa.

One Stop Total Solutions provider for all the Footwear &

COMPLETE RANGE OF FOOTWEAR COMPOUNDS

- PVC Compact, Microlon, Green Cloud (Light Weight), Cork etc. TPR - Normal, Expandable (Light Weight), Low Abrasion, Cork etc.

# **FOOTWEAR COMPOUND**





# **KLJ VINYL**

# **PVC COMPOUND - COMPACT GRADE**

other Compounds need with

multi location manufacturing

facilities at Silvassa and Agra

Properties	Specific Gravity	Hardness (Shore A)	Thermal Stability at 200°C	Tensile Strength	Elongation at Break	Volatile Loss at 1300°C for 3 Hours	Recommended Processing Temprature	
Unit	N/A	Nos.	Minutes (Min.)	Kg/cm² (Min.)	% (Min.)	% (Max.)	°C	Applications
Test Method	ASTM D 792	ASTM D 2240	IS 5831	ASTM D 638/I	S 10810 (Part 7)	KPCL/QCD/WIN-2		
Grades								
BT 55 N/AT	1.16 ± 0.02	55 ± 3	30	70	350	1.5	145 - 175	Soles
BT 60 B	1.18 ± 0.02	60 ± 3	25	100	350	1.0	145 - 180	Soles/Chappals
ET 3	1.19 ± 0.02	69 ± 3	20	110	280	0.6	145 - 175	Chappal Straps
ET 5 N	1.17 ± 0.02	55 ± 3	20	75	300	0.6	130 - 160	Chappals/Straps
Q 60 SPL	1.22 ± 0.02	60 ± 3	20	90	350	0.6	145 - 180	Soles
Q 70 SPL	1.23 ± 0.02	70 ± 3	25	90	300	1.5	145 - 180	Soles & Straps
Q 85 SPL	1.24 ± 0.02	85 ± 3	25	120	250	1.5	145 - 180	Soles
BT 60 C	1.23 ± 0.02	60 ± 3	15	90	350	2.0	145 - 175	Soles
BATA II	1.25 ± 0.02	65 ± 3	15	100	375	2.0	145 - 175	Soles
SH 60 NEW	1.25 ± 0.02	65 ± 3	12	100	375	2.5	145 - 180	Soles
ET 3 II R	1.26 ± 0.02	70 ± 3	10	120	300	0.6	145 - 175	Transparent Chappals/ Belly Shoes
AR 55 NB	1.32 ± 0.03	68 ± 3	20	70	300	2.0	145 - 160	Gumboots
S4TL	1.28 ± 0.02	65 ± 3	15	60	200	2.0	140 - 180	Transparent Gumboots Soles
S4TU	1.25 ± 0.02	60 ± 3	15	60	200	2.0	140 - 180	Transparent Gumboots Uppers
Q 50 F N/AT	1.25 ± 0.03	50 ± 3	30	50	250	1.5	140 - 160	Gumboots
TFG 35 M RH	1.12 ± 0.02	35 ± 3	15	20	300	1.0	130 - 160	Gumboots for Low Temp (-20°C)
IQ 55	1.36 ± 0.02	55 ± 3	15	90	350	1.5	145 - 175	Soles

- Fluorscent & Glitter Compounds are also available
- As per requirement, all grades are available in different colours, different hardness and UV stabilised. Properties may vary with hardness All grades are also available as per RoHS guidelines, REACH norms and Phthalate free compositions with Antimicrobial & Antifungal properties
- The above properties are indicative and represent the values as tested in our laboratories
- There is no guarantee/warranty what-so-over unless mentioned
- Suitability of the product for particular application may be verified before use All our PVC grades are 100% recyclable

# **PVC COMPOUND - FOAM GRADE**

Properties	Specific Gravity	Hardness (Shore A)	Thermal Stability at 200°C	Tensile Strength	Elongation at Break	Volatile Loss at 1300°C for 3 Hours	Recommended Processing Temprature	
Unit	N/A	Nos.	Minutes (Min.)	Kg/cm² (Min.)	% (Min.)	% (Max.)	°C	Applications
Test Method	ASTM D 792	ASTM D 2240	IS 5831	ASTM D 638/I	S 10810 (Part 7)	KPCL/QCD/WIN-2		
Grades								
RBM 50 III SKS	1.20 ± 0.02	55 ± 3	20	20	100	1.0	140 - 170	Light Weight Rubberised Soles
RBM 52 III SKS	1.12 ± 0.02	53 ± 3	20	20	100	1.0	140 - 170	Light Weight Rubberised Soles
BM AS 65	0.60 ± 0.05 (Foam Density)	65 ± 3	20	25	100	1.0	140 - 170	AntistaticType Soles
BM AIR I	1.23 (Max.)	53 ± 3	15	30	100	2.0	150 - 200	Light Weight Rubberised Sole
BM AI B II	1.25 ± 0.03	45 ± 3	10	40	200	2.0	140 - 170	Full Shoes
BM SUPER G 2/GF	1.26 ± 0.03	61 ± 3	10	70	200	1.5	140 - 175	Sports Shoe Sole
BM 55 KCD	1.26 ± 0.02	$60 \pm 3$	20	50	150	1.0	145 - 170	Chappals & Soles
BM 99F (D)	1.27 ± 0.02	60 ± 3	15	50	170	1.2	140 - 175	Shoes/Soles
BM 50 B	1.29 ± 0.02	$68 \pm 3$	20	70	200	2.0	145 - 175	Chappals & Soles
BM SUPER G4	1.21 ± 0.02	60 ± 3	20	50	150	1.5	140 - 180	Light Weight Sports Shoe
BM GS 60	1.25 ± 0.02	$60 \pm 3$	10	50	150	1.5	145 - 175	Sports Shoes
5 CH	1.32 ± 0.02	65 ± 3	15	90	280	1.5	145 - 175	School Shoes/Soles
5 CH 55	1.35 ± 0.02	55 ± 3	15	50	200	1.5	145 - 175	Cho-Cho Kids Soles
A 2KH	1.31 ± 0.02	60 ± 3	10	70	200	2.0	140 - 175	Sports Shoes/Soles
BM 65 BT	1.31 ± 0.02	60 ± 3	10	70	200	2.0	140 - 175	Soles & Shoes
BM AIR D	1.32 ± 0.02	73 ± 3	20	120	150	1.2	150 - 180	Soles
BM 68	1.44 ± 0.02	65 ± 3	25	55	200	2.0	140 - 175	Soles
BM ARM 66	1.35 ± 0.02	65 ± 3	10	50	150	2.0	140 - 170	Bubble Gummer Flavoured Kids Soles

- As per requirement all grades are available in different colours, different hardness and as UV stabilised. Properties may vary with hardness All grades are also available as per RoHS guidelines, REACH norms and Phthalate free compositions with Antimicrobial & Antifungal properties
- The above properties are indicative and represent the values as tested in our laboratories
- There is no quarantee/warranty what-so-over unless mentioned
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# **KLJ VA**

EVA COMPOUND										
Properties	Surface Finish	Specific Gravity	Hardness after Expansion (Shore A)	Expansion at 175 ± 3°C Pressure 200 ± 5 Kg/cm2	Abrasion Resistance					
Unit	N/A	N/A		%	mm3	APdi				
Test Method	KLJTM	ASTM D792	ASTM D2240	KLJTM	ISO 4649	Applications				
Grades										
CM N1		0.25 ± 0.05	43 ± 3	56 - 58	N/A	Chappals & Sandals - Compression Moulding				
CM T1		$0.25 \pm 0.05$	43 ± 3	59 - 61	N/A	Chappals & Sandals - Compression Moulding				
CM N1 BK DR	u, sa	0.25 ± 0.05	40 ± 4	51 ± 2	N/A	Chappals & Sandals - Compression Moulding				
KS N1 BK (P) S2M	natic n hol	0.25 ± 0.05	47 ± 4	38 ± 2	N/A	Chappals & Soles - Injection Moulding				
KS N1 BK IM (F)	contamination,	$0.25 \pm 0.05$	43 ± 3	40 ± 2	N/A	Chappals & Soles - Injection Moulding				
KS N1	from con'	0.25 ± 0.05	48 ± 2	46 ± 2	N/A	Chappals & Soles - Injection Moulding				
KS EXPH 1.35	for the day	$0.35 \pm 0.05$	55 - 60	32 - 38	N/A	Chappals & Soles - Injection Moulding				
KS EXPH 1.40	icles	0.25 ± 0.05	55 - 60	38 - 46	N/A	Chappals & Soles - Injection Moulding				
KS EXPH 1.43	ld be	0.25 ± 0.05	55 - 60	40 - 47	N/A	Chappals & Soles - Injection Moulding				
KJ/EXP/R/CMT1 RUBBERISED	Should be free from c hard particles, bubbl	0.25 ± 0.05	20 ± 4	57 - 63	N/A	Chappals, Sandals & Soles - Compression Moulding/Injection Moulding				
EVA 5033 BT 5		$0.33 \pm 0.04$	33 ± 4	50 ± 4	≤250	Unit Sole - Injection Moulding				
EVA YM 1.9 20 P 02		0.15 ± 0.05	35 ± 5	71 - 75	N/A	Yoga Matt, Compression Molding				
EVA YM 1.9 20 P 02 ECO		0.15 ± 0.05	30 ± 5	80 ± 5		Yoga Matt, Compression Molding				

As per requirement all grades are available in different colours, hardness and expansion. The properties of the Compounds are indicative & represent the values as tested in our laboratories. There is no warranty/quarantee whatsoever. The suitability of the particular application may be verified before use. All our EVA grades are also available in REACH & ROHS

MFI Hardness Tensile Elongation

## **KLJ FLEX**

# **TPR COMPOUND**

Unit	Visual	Gravity		(Shore A)	Strength	at Break	Strength	Resistance	growth less than 6 mm in 80K cycles	Flex-cut growth less than 6 mm in 30K cycles	Look	Applications
Test Method			gm/10Min		Kg/cm2	%	Kg/cm	mm3				
Grades	KLJTM	ASTM D792	ASTM D1238	ASTM D2240	ASTM D412	ASTM D412	ASTM D624	ISO 4649	KLJ INTERNAL	SATRA TM 161		
SPX 60		$0.92 \pm 0.02$	≥50	60±3	≥55	≥650	≥26	≤200	Pass	Pass	Transparent	Footwear Soles
STR 60		$0.92 \pm 0.02$	≥30	60±3	≥55	≥650	≥20	≤150	Pass	Pass	Transparent	Footwear Soles
KT M 15/60		$0.98 \pm 0.02$	≥40	60±3	≥45	≥500	≥24	≤220	Pass	Pass	Semi Matt	General Purpose Footwear
KTL 28/60		$0.94 \pm 0.02$	≥50	60±3	≥50	≥700	≥22	≤200	Pass	Pass	Transluscent	Sports Shoes/Footwear Soles
KT L 29/60		$0.94 \pm 0.02$	≥40	60±3	≥60	≥600	≥22	≤200	Pass	Pass	Transluscent	Thin & Stitchable Footwear Soles
KT L 20/60		$0.96 \pm 0.02$	≥35	60±3	≥50	≥600	≥20	≤220	Pass	Pass	Transluscent	Footwear Soles
S 6020 HL		$0.94 \pm 0.02$	≥35	60±3	≥50	≥550	≥20	≤200	Pass	Pass	Transluscent	Footwear Soles
SFC HM 60		$0.96 \pm 0.02$	≥30	60±3	≥40	≥500	≥21	≤250	Pass	Pass	Matt	High Matt Footwear Soles
SFC SM 60		$0.96 \pm 0.02$	≥30	60±3	≥40	≥440	≥22	≤250	Pass	Pass	Semi Matt	Semi Matt Footwear Soles
KT NM/60	l std	$0.97 \pm 0.02$	≥40	60±3	≥50	≥550	≥25	≤230	Pass	Pass	Shiny	Footwear/Non Marking
MFH 60	풀	$0.99 \pm 0.02$	≥20	60±3	≥42	≥425	≥20	≤220	Pass	Pass	Semi Matt	Footwear Semi Matt
KT M 10/60	Ĭ,	$0.99 \pm 0.02$	≥35	60±3	≥35	≥450	≥22	≤240	Pass	Pass	Semi Matt	General Footwear Soles
MFL 60	Visual to match with the std.	$0.99 \pm 0.02$	≥40	60±3	≥40	≥440	≥20	≤250	Pass	Pass	Shiny	General Footwear Soles
KT V 09/60	- E	1.01 ± 0.02	≥35	60±3	≥38	≥400	≥18	≤280	Pass	Pass	Shiny	General Footwear Soles
KLJ BD 60	isna	1.015 ± 0.02	≥35	60±3	≥38	≥400	≥21	≤280	Pass	Pass	Shiny	Footwear Soles
SPO 60	>	$1.00 \pm 0.02$	≥35	60±3	≥35	≥440	≥22	≤250	Pass	Pass	Shiny	Footwear Soles
DC A2 60		1.00 ± 0.02	≥45	60±3	≥40	≥520	≥20	≤250	Pass	Pass	Shiny	Footwear Soles
KT LF 60		$0.99 \pm 0.02$	≥35	60±3	≥45	≥560	≥22	≤200	Pass	Pass	Shiny	Footwear Soles
KTL 17 60	1	0.98 ± 0.02	≥40	60±3	≥45	≥500	≥22	≤230	Pass	Pass	Transluscent	Footwear Soles
CLK 60N		$0.96 \pm 0.02$	≥45	60±3	≥45	≥600	≥24	≤200	Pass	Pass	Shiny	Footwear Soles
						SPECIAL	GRADES					
KT GT/60		$0.92 \pm 0.02$	≥120	60 ± 3	≥55	≥600	≥22	≤190	Pass	Pass	Matty Rubber Look	Rubberished/High Matt & Dual Matt
KT GE2/60		$0.92 \pm 0.02$	≥40	60 ± 3	≥55	≥650	≥22	≤200	Pass	Pass	Matty Rubber Look	Rubberished/High Matt & Dual Matt
KT C21/60		$0.92 \pm 0.02$	≥35	60 ± 3	≥55	≥650	≥24	≤240	Pass	Pass	Matty Rubber Look	Rubberished/High Matt & Dual Matt
KTC 26 65		$0.90 \pm 0.02$	≥30	65 ± 3	≥50	≥550	≥24	≤150	Pass	Pass	Rubbery Look	Rubberished/High Matt & Dual Matt
FL 70		$0.92 \pm 0.02$	≥40	70 ± 3	≥45	≥400	≥22	≤220	Pass	Pass	Matt	Footwear Dual Matt Finish Soles
KT C23/60		$0.93 \pm 0.02$	≥35	60 ± 3	≥60	≥650	≥27	≤240	Pass	Pass	Matt	Thin Footwear Soles
HT 75		$0.92 \pm 0.02$	≥60	75 ± 3	≥75	≥600	≥30	≤200	Pass	Pass	Matt	Thin & Stitchable Footwear Soles
LA 60	të.	$0.94 \pm 0.02$	≥30	60 ± 3	≥50	≥600	≥25	≤120	Pass	Pass	Shiny	Low Abrasion Footwear
KT I 1/60 WF CORK	ag S	$0.96 \pm 0.02$	N/A	60 ± 3	≥35	≥400	≥22	≤250	Pass	Pass	Cork Look	Footwear Cork
KT FC ILW 6	i i	$0.60 \pm 0.03$	≥35	60 ± 3	≥35	≥460	≥18	≤280	Pass	Pass	Matt	Light Weight Expanded Footwear Soles
KT FCM 6	Visual to match with the std.	$0.60 \pm 0.03$	≥25	60 ± 3	≥20	≥350	≥10	≤500	N/A	N/A	Matt	Medium Light Weight Expanded Mid Footwear Soles
KT FC ILW 5	P	$0.60 \pm 0.03$	≥80	60 ± 3	≥20	≥300	≥12	≤300	Pass	Pass	Matt	Superlight Weight Footwear Soles
DC FC M 7	Vist.	0.75 ± 0.03	≥60	60 ± 3	≥25	≥300	≥13	≤350	N/A	N/A	Matt	Medium Light Weight Footwear Soles
KTC 86		0.99 ± 0.02	30 ± 5	86 ± 2	≥50	≥600	≥25	≤225	N/A	N/A	Semi Matt	Shoe Welt
KTC 64		0.98 ± 0.02	30 ± 5	64 ± 3	≥45	≥600	≥22	≤300	N/A	N/A	Semi Matt	Shoe Welt
GX 65		0.94 ± 0.02	≥45	65 ± 3	≥50	≥650	≥24	≤200	Pass	Pass	Shiny	Footwear Soles
BTR 60		1.03 ± 0.02	≥10	60 ± 3	≥18	≥400	≥10	≤300	Pass	Pass	Shiny	Green TPR/Bio Bases Sustainable Footwear Sole
KTC 25 60		$0.92 \pm 0.02$	≥45	60 ± 3	≥50	≥650	≥24	≤240	Pass	Pass	Semi Matt	Non Marking Footwear
KTC 7 60		0.93 ± 0.02	≥45	60 ± 3	≥50	≥650	≥24	≤240	Pass	Pass	Semi Matt	Thin Soles
KTL 27 55		$0.94 \pm 0.02$	≥45	55 ± 3	≥45	≥600	≥22	≤220	Pass	Pass	Semi Matt	Footwear Soles

All grades are available in different colours and hardnesses, 40 to 80 Shore A. Properties may vary with change in hardnesses

All our TPR grades are REACH & RoHS Compliant. We are a certified member of SATRA

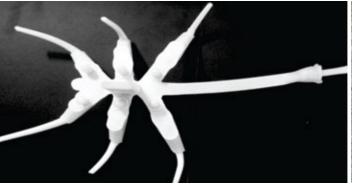
The above properties are indicative and represent the values as tested in our laboratories. There is no guarantee/warranty whatsoever. Suitability of the product for particular application may be verified before use.

# **PVC COMPOUNDS - GREEN CLOUD FOR LIGHT WEIGHT SOLES**

Properties	Foam Density*	Hardnessz (Shore A)	Thermal Stability at 200°C	Tensile Strength	Elongation at Break	Abrasion Resistance at 10 N **	Phthalate Content	Bennewert Flex at 30000 Cycle***	Recommended Processing Temprature	
Unit	g/cc	Nos.	Minutes (Min.)	Kg/cm2 (Min.)	% (Min.)	mm3	PPM	mm	°C	Applications
Test Method	KLJTM	ASTM D2240	IS 5831	ASTM D638/IS 1	0810 (Part 7)	ISO4649 Type A	KLJTM	SATRA TM 161		
Grades										
DCN 65	$0.60 \pm 0.05$	65 ± 3	50	40	100	450	<100	Pass	150 - 200	Light Weight, Superior Surface Finish
DCT 65 200	0.60 ± 0.05	65 ± 3	50	40	100	250	<100	Pass	150 - 200	Light Weight Superior Surface Finish & Highly Abrasion Resistant, Shoe Soles

- 1. All the values shown are the average values of the lot as tested in our lab and must be taken as a guideline only
- 2. Foam density & Abrasion results are obtained on a three step sheet of thickness 8 mm and Benewert flex on sole molded on our lab horizontal molding machine at temperature 160°C-170°C. Results may vary from article to article.
- 3. The point/s of injection in sole mold should be 3-7 mm conical shaped and runners to be 10-12 mm round shaped with minimum flow restrictions. Based on thickness and length of sole, number of injection points are to be designed, so that there is optimum filling of mold
- 1. Green Cloud Vinyl Compounds have been developed over the years to be an extremely light material. This is possible due to new revolutionary expanded use of the Compound
- 2. Green Cloud Vinyl Compounds are not just light but its microcellular structure gives exceptional characteristics like resistance to prolong stress, flexing, slip and ageing
- 3. All grades are RoHS and REACH compliant and available with Antimicrobial & Antifungal properties

The specifications given are for guidelines only. The Compound is designed to run on different machine, however some adjustments may be required on individual machine. There is no quarantee and/or warranty what so ever, after processing in any case, our liability shall be restricted to the replacement of material in packed condition. Customers are to check the quality, prior to commercial use. All properties are tested as per standards mentioned above. Any data may change without prior information and do not constitute the agreed quality





Disclaimer: The specifications given for all Footwear Compounds are for quideline only. The Compound is designed to run on different machine, however some adjustments may be required on individual machine. There is no guarantee and/or warranty what so ever, after processing in any case, our liability shall be restricted to the replacement of material in packed condition. Customers are to check the quality, prior to commercial use. All properties are tested as per standards mentioned above. Any data may change without prior information and do not constitute the agreed quality of our Compound.



KLJ Polymers & Chemicals Limited is a member of **SATRA for all its Footwear Compounds.** 



