KESTRELRIB

'RAISED RIB PROFILED' THERMOPLASTIC ROAD MARKING MATERIAL

MATERIAL SPECIFICATION SHEET (MSS04)

description >>>

KESTRELRIB is a thermoplastic line marking material specifically formulated for the creation of road markings which give both an audible and sensory warning when driven over. Application of KESTRELRIB requires specialist modified extrusion equipment capable of producing "raised rib" profile patterns. Also known as 'Ribline' or 'Profiled' markings, the raised rib delivers effective sensory warnings through vibration and a distinctive noise when driven on.

KESTRELRIB formulations are also available for producing an array of alternative patterns such as discontinuous solid markings or dotted lines - Please contact Kestrel for advice.

scope of use >>>

KESTRELRIB is recommended for edge of carriageway markings to warn drivers if they are veering off the road. This is especially important on motorways to reduce accidents due to driver fatigue. KESTRELRIB may also be utilised for non-linear, hand screed applied markings such as mini-roundabouts, traffic calming humps and other specialist applications.

product highlights / benefits >>>

- KESTRELRIB remains visible in conditions of wetness or rain as the raised ribs remain above the layer of surface water
- Provides a cost-effective road safety warning measure against driver fatigue and sleepiness
- Long-Lasting – Durable thermoplastic and its vibratory nature discourages it being driven on
- Available in White and Yellow in a variety of performance specifications – please enquire!

technical data >>>

Laboratory Tests	Value	Class
BS EN 1871 Softening Point	≥ 65°C	SP1
Export Grades	≥ 95°C	SP3
BS EN 1871 Luminance (ß)	≥ 70 White ≥ 50 Yellow	LF4 (min) LF2 (min)
Road Trials	**Value**	**Class**
BS EN 1824 Durability	$1x10^6$ wheel passes	P5
Performance Tests	**Value**	**Class**
BS EN 1436 Retroreflectivity (RL)	≥ 100 mcd m^{-2} lx^{-1} (white)	R2 (min)
Initial retroreflectivity is entirely dependent on the conditions of application, colour and surface applied materials.		
BS EN 1436 Luminance (ß)	≥ 30 White ≥ 20 Yellow	B2 (min) B1 (min)
BS EN 1436 Skid Resistance (SRT)	≥ 45	S1 (min)
Higher initial skid resistance is achieved by the use of a special Drop on Bead/Aggregate/Grain mixture.		
Other Data	**Value**	**Class**
Flash Point (Open Cup)	≥ 230°C	N/A
Maximum Safe Heating Temp	220°C	N/A
Application Temp.	170 - 200°C	N/A
Relative Density	1.9 ± 0.2 g/cm^3 (mt / m^3)	N/A
Coverage Rate	Approx. 100 m^2/mt	N/A
Coverage rate depends on applied thickness of both base line and raised ribs, rib spacing specifications and road surface texture.		

packaging & storage >>>

KESTRELRIB thermoplastic is packed in approx. 25kg heat-sealed meltable "pillow sacks" in 1 tonne lots. Each batch is covered with a polyethylene top-sheet and shrink-wrapped. Materials should be stored under cover in dry conditions and if stored correctly will have a shelf life of > 1 year. The pillow sacks contain ventilation holes to prevent bursting and it is important that the material is stored under cover to prevent ingress of moisture. Wet material poses a significant Health and Safety risk to operators as it can "foam" excessively and overflow from the pre-heater.

health & safety information >>>

Please refer to separate H&S Data Sheet (MSDS XX). General information for all products is contained on the reverse of the pallet weight sheet.

surface preparation >>>

The surface should be dry, free from dust, dirt, grease or oil and any other detritus material. The road

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surface temperature should be above 5°C. Ideally existing markings should be removed prior to application.

KESTRELRIB may be applied over existing thermoplastic markings provided that they are in a sound condition and will not be easily removed from the road surface. KESTRELRIB should not be applied over old paint markings.

On worn bituminous and concrete surfaces, a suitable tack coat primer should be used in accordance with the manufacturer's instructions prior to application.

It should be noted that thermoplastic road markings laid on new bituminous surfaces could suffer from "bitumen carry-over" leading to discolouration and masking of the road markings.

application information >>>

KESTRELRIB is supplied in 25kg (approx.) low melt polyethylene bags that may be melted with the product.

Place a few bags of product into the preheater, fitted with mechanical agitation and temperature control devices, and heat up to approaching the stated application temperature.

When this initial material is molten the remainder of the preheater may then be filled (heating a small amount initially, increases the rate of heat transfer and reduces heating time for a full preheater of material).

When the material has been brought to the recommended temperature, and has been thoroughly mixed, it can then be transferred to the application equipment.

DO NOT EXCEED the maximum safe heating temperature as this is potentially dangerous and could lead to flashing, discolouration of the material and severe deterioration of the binder.

Surface applied glass beads or bead / aggregate / grain mix recommended by Kestrel Thermoplastics should be used. Application rates vary depending upon the grade of drop-on material to achieve optimum performance. Typical application rates are 400 ± 100 g/m^2.

Use of alternative materials may reduce the performance characteristics of KESTRELRIB products.

KESTRELRIB products should be applied at the recommended thicknesses as follows:

EDGE OF CARRIAGEWAY MARKINGS ONLY:

1) EXTRUSION BASE LINE	2.5 – 4mm
2) RAISED RIB PROFILES	Up to 11mm**

** Overall thickness of combined base line and raised rib profile should not exceed maximum thickness specified in local/national regulations. Users should refer to local guidelines.

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The information contained in this specification is believed to be accurate as of the date of issue. Kestrel Thermoplastics Ltd. reserves the right to make changes to this specification as required. Performance data compiled from independent trials is INDICATIVE only and does not constitute a guarantee as in situ performance is significantly affected by application conditions. It is the users responsibility to ensure that the product selected is suitable for the intended use.

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