



TECHNICAL DATA SHEET ROSEHILL TPV® 'INPLAY' 'INFILL' 'INSPORT' Coloured Rubber Granules

DESCRIPTION

GENERAL

ROSEHILL TPV® is the registered brand name for a unique coloured rubber granule designed and continuously manufactured by Rosehill Polymers Ltd in the United Kingdom using state of the art technology, under strict in-house quality controls.

It is an alternative to EPDM & colour coated rubber granules presently available for the use in impact absorbing rubberised sports and play surfaces.

The material is produced using only the highest quality virgin polymer, antioxidants, pigments & UV stabilisers available. We never compromise on quality and manufacture in accordance with ISO 9001. The product has been formulated without the incorporation of sulphur, clay fillers, heavy metals (such as zinc) and phthalate plasticizers.

ADVANTAGES

ROSEHILL TPV® is a 100% fully crosslinked, peroxide cured, non-porous, non-spherical, polypropylene-free elastomer based coloured rubber with angular granule size ranging from 0.5mm – 4mm. It is not an EPDM or EPM rubber.

ROSEHILL TPV® granules will continue to perform in all weather extremes. It is ideal for use all over the world irrespective of weather conditions and temperatures.

ROSEHILL TPV® offers excellent thermal stability and does **not** leach out carbon black or colour pigments. The product is UV stable and weather resistant. It does not harden over time like EPDM and colour-coated rubber granules. It remains supple to the touch even after extremes of UV ageing and constant sunlight.

ROSEHILL TPV® is made using a continuous process whereas the majority of EPDM is made in batches. Our system allows for better consistency throughout in terms of colour and granular size distribution.

ROSEHILL TPV® will not self-ignite nor is it flammable.

ROSEHILL TPV® is fully tested to meet internationally recognised standards for use in sports and play applications, including:

BS 7188 (Impact absorbing playground surfacing – Performance requirements and test methods)

BS EN 1177 (Impact attenuating playground surfacing – Determination of critical fall height)

BS EN 14877 (Synthetic surfaces for outdoor sports areas – specification)

IAAF Certification of Synthetic Track Products

FIFA Quality Program for Football Turf

ROSEHILL TPV® is highly durable and can be used in children's play area safety surfacing, multi-games areas (MUGAs), general sports surfacing, swimming pool surrounds, running tracks and rubber play tile production.

ROSEHILL TPV® offers excellent compatibility and adhesion with polyurethane binders and adhesives due to modification of the surface and non-porosity, allowing for lower binder consumption in comparison to EPDM.

HEALTH AND SAFETY

ROSEHILL TPV® poses no risk towards human health and/or environment because of carefully selected ingredients.

ROSEHILL TPV® is free of toxic or carcinogenic components and is fully compliant with the following standards:

ZEK 01.4-08 Testing and Validation of Polycyclic Aromatic Hydrocarbons (PAH) in the course of GS-Mark Certification

BS EN 71-3:2013 Safety of toys Part 3: Migration of certain elements

For further advice please refer to the information offered in the safety data sheet (SDS) for this product.

TYPICAL PROPERTIES

Appearance	Angular non-porous granules																														
Density (BS ISO 2781)	1.55g/ml (\pm 0.05)																														
Base polymer content (BS EN ISO 3451-1)	>20%																														
Hardness (BS ISO 7619-1)	65°A (\pm 5)																														
Tensile strength (BS ISO 37)	>3.0 MPa																														
Elongation @ break (BS ISO 37)	>400%																														
Bulk density	ROSEHILL TPV® 'INPLAY' (1-4mm) < 700g/l ROSEHILL TPV® 'INFILL' (0.5 - 2.5mm) < 700g/l ROSEHILL TPV® 'INSPORT' (0.5mm -1.5mm) for sports & spray applications = 700g/l																														
Available sizes	ROSEHILL TPV® 'INPLAY' (1-4mm) for sports & play ROSEHILL TPV® 'INFILL' (0.5 - 2.5mm) for grass infill ROSEHILL TPV® 'INSPORT' (0.5mm -1.5mm) for sports & spray applications																														
Sieve analysis	ROSEHILL TPV® 'INPLAY' (1-4mm) for sports & play <table> <tr><td>> 4.00mm</td><td>0 – 5%</td></tr> <tr><td>3.35 – 4.00mm</td><td>0 – 20%</td></tr> <tr><td>2.36 – 3.35mm</td><td>40 – 60%</td></tr> <tr><td>1.70 – 2.36mm</td><td>20 – 40%</td></tr> <tr><td>1.00 – 1.70mm</td><td>5 – 20%</td></tr> <tr><td>0.50 – 1.00mm</td><td>0 – 1%</td></tr> <tr><td>< 0.5mm</td><td>< 0.5%</td></tr> </table> ROSEHILL TPV® 'INFILL' (0.5 - 2.5mm) for grass infill <table> <tr><td>> 4.00mm</td><td>0%</td></tr> <tr><td>3.35 – 4.00mm</td><td>0%</td></tr> <tr><td>2.50 – 3.35mm</td><td>0 – 20%</td></tr> <tr><td>2.00 – 2.50mm</td><td>10 – 30%</td></tr> <tr><td>1.70 – 2.00mm</td><td>20 – 40%</td></tr> <tr><td>1.00 – 1.70mm</td><td>25 – 50%</td></tr> <tr><td>0.50 – 1.00mm</td><td>5 – 15%</td></tr> <tr><td>< 0.5mm</td><td>0 – 1%</td></tr> </table>	> 4.00mm	0 – 5%	3.35 – 4.00mm	0 – 20%	2.36 – 3.35mm	40 – 60%	1.70 – 2.36mm	20 – 40%	1.00 – 1.70mm	5 – 20%	0.50 – 1.00mm	0 – 1%	< 0.5mm	< 0.5%	> 4.00mm	0%	3.35 – 4.00mm	0%	2.50 – 3.35mm	0 – 20%	2.00 – 2.50mm	10 – 30%	1.70 – 2.00mm	20 – 40%	1.00 – 1.70mm	25 – 50%	0.50 – 1.00mm	5 – 15%	< 0.5mm	0 – 1%
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ROSEHILL TPV® 'INSPORT' (0.5mm -1.5mm) for sports & spray applications

> 1.70mm	< 1%
0.5 – 1.70mm	> 80%
< 0.5mm	< 2%

Available colours

beige	RH30	
mustard	RH40	
bright yellow	RH41	
cream white	RH31	
orange	RH50	
standard red	RH01	
bright red	RH02	
funky pink	RH90	
purple	RH21	
light blue	RH22	
standard blue	RH20	
turquoise	RH26	
azure blue	RH23	
standard green	RH10	
bright green	RH11	
dark green	RH12	
dark grey	RH60	
light grey	RH61	
pale grey	RH65	
brown	RH32	
dark brown	RH33	
black	RH70	

STORAGE

HANDLING	Keep material dry at all times & out of direct UV radiation whilst in the plastic bags
PACKAGING	25kg PE Bags UV resistant packed to 40 bags per 2-way wooden pallet. 1000 Kg big bags are also available.

CONTACT DETAILS

Please contact our Sales Team on +44 (0) 1422 839456, email: rosehill@rosehillpolymers.com or fill in the form <https://www.rosehilltpv.com/contact-us/> for further information on ROSEHILL TPV® 'INPLAY', ROSEHILL TPV® 'INSPORT' and ROSEHILL TPV® 'INFILL', together with our full range of FLEXILON polyurethane binders and athletic tracks/MUGA systems.