TECHNICAL DATA SHEET

REGALREZ™ 6108 Hydrocarbon Resin

REGALREZ™ 6108 hydrocarbon copolymer is produced by polymerization and partial hydrogenation of pure monomer hydrocarbon feedstocks. It is highly stable, light colored, low molecular weight copolymer suggested for use in adhesives, coatings, sealants, and caulks. Due to its low color, high stability and balance of cycloaliphatic and aromatic structure, REGALREZ™ 6108 provides a breadth of compatibility that is not possible with a purely aromatic or aliphatic tackifier. It is suggested for use in applications where fully hydrogenated tackifiers or pure monomer aromatic tackifiers are incompatible or do not give the desired balance of properties. In hot melt adhesives based on styrene block copolymers, it provides excellent room temperature cohesion with low adhesive viscosity.

- Excellent thermal and UV stability
- Highly stable
- Low odor
- Partially hydrogenated
- Water-white color
- Wide compatibility

For further information regarding this product please refer to:

Synthomer Adhesive Technologies

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Property	Typical Value	Unit	Method[1]
Ring and Ball Softening Point	108	°C	ASTM E 28
Color, Yellowness Index	3		ASTM E 313, 50% solids in toluene
MMAP cloud point	54	°C	from 1:2 mixture of methylcyclohexane and aniline
DACP cloud point	25	°C	from 1:1 mixture of xylene and diacetone alcohol
Molecular Weight, Mz	2390	g/mol	
Polydispersity (Mw/Mn)	1.9		
Melt Viscosity at 125°C	1000	poise	Brookfield
Glass Transition Temperature (Tg-midpoint)	55	°C	DSC, 20°C/minute
Melt Viscosity at 200°C	1	poise	
Density at 21°C	1.01	kg/L	
Melt Viscosity at 170°C	10	poise	
Melt Viscosity at 145°C	100	poise	
Molecular Weight, Mn	780	g/mol	GPC using polystyrene standards, elution with THF
Molecular Weight, Mw	1460	g/mol	

[1] internal method based upon the specified norm

Applications

Caulks and Sealants, Film Modification, Hygiene Adhesives, Labels, Other coatings, Packaging, Plastic Modification, Specialty Tapes, Wax Modification

Compatibility and Solubility

REGALREZ™ 6108 is compatible in useful proportions with natural and synthetic rubbers, SBR, polychloroprene, and with the midblock of SBS (styrene-butadiene-styrene), SIS (styrene-isoprene-styrene), SIBS (styrene-isoprene/butadiene-styrene), and SEBS (styrene-ethylene/butylene-styrene) block copolymers, as well as modifying the styrenic endblock of all styrene-containing block copolymers. REGALREZ™ 6108 can be used with EVA (ethylene-vinyl acetate) copolymers with up to 40% vinyl acetate, polyethylene, paraffin and microcrystalline waxes.

REGALREZ™ 6108 is soluble in aliphatic and aromatic solvents, C5 and higher esters and ketones. It is insoluble in glycol ethers, glycol ether esters, and alcohols. For low/zero VOC systems REGALREZ™ 6108 is soluble in t-butyl acetate (TBA) and perchlorobenzenetetrafluoride (PCBTF) and will tolerate some acetone and/or methyl acetate as a diluent in solvent systems based on TBA and/or PCBTF. VOC exemptions and environmental regulations vary regionally and compliance with local standards should be verified before any claims about VOC content are made.

Packaging

Flake, in multi-all paper bags (50 lbs, 22.7 kg, net weight).

Storage

Due to the thermoplastic behavior, pastillated and flaked tackifiers may fuse, block or lump. This can be accelerated under any of the following conditions: 1) above ambient temperature 2) prolonged storage 3) pressure, e.g., stacking pallets, or a combination of these conditions. This is particularly applicable for low softening point tackifier grades. In order to maintain the flake or pastille shape, we therefore recommend storing the material in a temperature-controlled area; be careful with stacking material or applying pressure and preventing prolonged storage. Do not double stack pallets. Prolonged, direct sunlight exposure should be avoided. Synthomer recommends storage temperatures below 24°C (75°F). It should be noted that lumping does not have a negative impact on the product specifications. Due to the nature of the product, claims regarding lumping cannot be accepted.

These products are prone to gradual oxidation, some more so than others. This could result in darkening and/or it could have an adverse effect on the solubility of the product in organic solvents or on its compatibility with polymers. Accordingly, it is recommended that strict control of inventory be observed at all times, taking care that the oldest material is used first.

The useful life of this product can be affected by storage and handling conditions. When stored in the original unopened container in an enclosed area and protected from moisture, extreme temperatures and contamination, the shelf life of this product is estimated to continue to meet applicable sales specifications for three years from the date of manufacture. Shelf life is a guide not an absolute value. The product should be reanalyzed for critical properties at the end of its shelf life to see if it meets specification for use.

Comments

Properties reported here are typical of average lots. Synthomer makes no representation that the material in any particular shipment will conform exactly to the values given.