EASTMAN

Technical Data Sheet

Regalite™ C6100 Hydrocarbon Resin

Applications

- Adhesives/sealants-b&c
- Bookbinding
- Carpet construction
- Case & carton sealing closings
- Casting wax
- Commerical printing inks
- Hygiene adhesives
- Labels non food contact
- Polymer modification
- Protective coatings
- Specialty tape
- Tape non food contact
- Tires

Product Description

Regalite™ C6100 hydrocarbon resin is a very light color, partially hydrogenated, modified aliphatic resin designed as an excellent tackifier for the midblock of thermoplastic block copolymers, including styrene-isoprene-styrene (SIS), [low, medium, and high styrene content] styrene ethylene butylene styrene (SEBS) and styrene-butadiene-styrene (SBS). It also shows excellent compatibility with ethylene vinyl acetate (EVA). Regalite™ C6100 is recommended for use in a variety of hot melt adhesives, including nonwoven assembly, packaging, bookbinding, glue sticks, and pressure-sensitive tape and label adhesives.

Typical Properties

Property	Test Method	Typical Value, Units
General		
Ring and Ball Softening Point	ASTM E 28	100 °C
Color, Gardner[c]		
2 cm cell		<1
24 hours @ 177°C		6.3
5 Hours @ 177°C		1.9
	ASTM D 6166	<1
Yellowness Index[c]		
2 cm cell	ASTM E 313	4.5
24 hours @ 177°C		67.4
5 Hours @ 177°C		14.6
% Weight Loss		
24 hours @ 177°C		1.3 %
Thermogravimetric (TGA) Analysis[b]		
% Weight Loss		9.4
Density		
@ 25°C		1.02 kg/dm^3
Cloud Point[d]		
DACP		31 °C
MMAP		60 °C
OMS		<-50 °C
Proton Nuclear Magnetic Resonance (NMR) Spectrometry		
Aliphatic Hydrogen		90.5 %

Aromatic Hydrogen	9.5 %
Olefinic Hydrogen	0 %
Molecular Weight Distribution[e]	
M_n	610
M_w	1010
M_w/M_n	1.66
M_z	1880
Melt Viscosity	
@ 140°C	5000 cP
@ 160°C	750 cP
@ 190°C	130 cP
Glass Transition Temperature (T_g)	
End	55.7 °C
Middle	49.4 °C
Onset	43.2 °C

[b]*2 hours @ 190°C (in Nitrogen)*
[c]*50% resins solids in toluene*
[d]*MMAP: cloud point measured in a 1:2 mixture of methylcyclohexane and aniline; DACP: cloud point measured in a 1:1 mixture of xylene and 4-methyl-2-pentanone; For more information see "Hydrocarbon Spectrum" brochure WA-86*
[e]*Molecular weight measured via Gel Permeation Chromatography (GPC) using polystyrene standards*

Storage

Due to the thermoplastic behavior, pastillated and half-ball resins 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 resin grades. 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.

When stored in accordance with the MSDS, in it's original unopened container in an enclosed area and protected from moisture, extreme temperatures and contamination, this product (in solid form only) is estimated to continue to meet applicable sales specifications for more than 2 years from the date of manufacture. First in first out inventory control is recommended.

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