

# Technical Data Sheet

## Regalrez™ 3102 Hydrocarbon Resin

### Applications

- Adhesives/sealants-b&c
- Case & carton sealing closings
- Film modification
- Labels non food contact
- Packaging components non food contact
- Paints & coatings
- Polymer modification
- Protective coatings
- Specialty tape
- Tape non food contact
- Tires
- Wax ingredients

### Product Description

Regalrez™ 3102 hydrocarbon resin is produced by polymerization and partial hydrogenation of pure monomer hydrocarbon feedstocks. It is highly stable, light colored, low molecular weight, nonpolar resin suggested for use in adhesives, coatings, sealants, and caulks. Due to its low color, high stability and balance of cycloaliphatic and aromatic structure, Regalrez™ 3102 provides a breadth of compatibility that is not possible with a purely aromatic or aliphatic resin. It is suggested for use in applications where fully hydrogenated or pure monomer aromatic resins are incompatible or do not give the desired balance of properties.

### Typical Properties

Property <sup>a</sup>	Test Method <sup>b</sup>	Typical Value, Units <sup>c</sup>
<b>General</b>		
Ring and Ball Softening Point	ASTM E 28	103 °C
Color, Gardner <sup>d</sup>	ASTM D 6166	<1
Cloud Point <sup>g</sup>		
DACP		-29 °C
MMAP		25 °C
OMSCP		<-40 °C
Molecular Weight <sup>f</sup>		
M <sub>n</sub>		800
M <sub>w</sub>		1500
M <sub>w</sub> /M <sub>n</sub>		1.9
M <sub>z</sub>		2400
Density		
@ 21°C		1.04 kg/L
Glass Transition Temperature (T <sub>g</sub> ) <sup>e</sup>		50 °C
Melt Viscosity		
1 poise		195 °C
10 poise		160 °C
100 poise		135 °C
1000 poise		125 °C

<sup>a</sup>Unless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.

<sup>b</sup>Unless noted otherwise, the test method is ASTM.

<sup>c</sup>Units are in SI or US customary units.

<sup>d</sup>50% in toluene.

<sup>e</sup>Glass transition temperature by differential scanning calorimetry.

<sup>f</sup>Molecular weight, z-average from gel permeation chromatography, elution with THF.

<sup>g</sup>Cloud point temperature from 2:1 Vol:Vol aniline-methylcyclohexane, Eastman method.

## Compatibility and Solubility

Regalrez™ 3102 is compatible with natural rubber, SBR, polychloroprene and the isoprene, and butadiene midblocks of SIS and SBS block copolymers as well as modifying the styrenic endblocks of all styrene-containing block copolymers. Regalrez™ 3102 can be used with EVA copolymers with up to 32% vinyl acetate. Regalrez™ 3102 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™ 3102 is soluble in t-butyl acetate 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

Pastilles, in multi-wall paper bags (50 lbs, 22.7 kg, net wt).

## Storage

Due to the thermoplastic behavior, pastillated and flaked 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.

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.

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.

Resins 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 resin 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.

---

*Eastman and its marketing affiliates shall not be responsible for the use of this information, or of any product, method, or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability of fitness of any product, and nothing herein waives any of the Seller's conditions of sale.*

2/28/2018 11:35:39 AM