RUBBOND® RR90

TECHNICAL DATA SHEET

Issue No
002/04

Revision Date
01.12.2022

Product
RUBBOND® RR90

Classification
Reinforcing Phenolic Resin
Reinforcing Phenol Formaldehyde Resin

Composition
Cashew nut shell liquid (CNSL) modified phenol – formaldehyde (PF) resins with low free phenol & without hexa methylene tetramine.

Physical properties:

Parameter	Specification
Physical Form	Red Brown Pastille

Chemical Properties:

Parameter	Specification	Test Method
Sp. Gravity @25 °C	1.16±0.05	D1817
Softening Point, °C (R&B, 5 °C/Min)	80 - 105	D6493/ E28
Moisture Content, % (Karl Fischer)	0.5 Max	E203
Ash Content, % (@950 °C, 1 Hr.)	0.5 Max	D4574
Free Phenol, (%)	2.0 Max	D1312

Applications
RUBBOND® RR90 resins could be used as reinforcing agents for rubber compounds containing natural rubber (NR), styrene-butadiene rubber (SBR), butadiene rubber (BR), nitrile-butadiene rubber (NBR), ethylene propylene diene monomer (EPDM) rubber and chloroprene (CR) rubbers for the manufacture of treads and sidewalls of tires, window sealing strips of cars, rubber rollers, floor coverings, brake linings, oil-resistant seals, heels and soles of shoes, hard hose materials, and typewriter / paper platen rollers.

As a reinforcing material, the use of RUBBOND® RR90 resin in rubber compounds can improve the hardness, tear resistance, abrasion resistance, tensile strength, reduced Mooney viscosity and prolonged scorch time properties. CNSL, tall oil and alkylphenol modified resins are expected to have better compatibility with rubber compounds so that accelerated filler dispersions with improved processability of rubbers could be achieved.

Use in Rubber Compounds
RUBBOND® RR90 resin should be used along with another methylene donor, such as hexamethylenetetramine (HMT) or hexamethoxymethylmelamine (HMMM), in the rubber compounding applications. In order to achieve an optimum reinforcement in rubber compounds, these reinforcing resins should be added at a level of about 5 - 15 weight %.

In the rubber compound mixing process, to avoid pre-vulcanization and also, to achieve good scorching property, RUBBOND® RR resins (as methylene acceptors) should be added during the first stage of mixing. The methylene donors, such as HMT or HMMM, should be added together with sulfur and accelerators at the final mixing stage.

RUBBOND® RR-90 resin is recommended as a processing aid and reinforcing resin for NBR compounds and adhesives. With the addition of hexamethylenetetramine, RUBBOND® RR resins impart maximum reinforcement and heat resistance properties in synthetic elastomers, especially NBR compounds and adhesives.

Packing
25 Kgs. In HDPE laminated paper bag

Shelf Life
12 Months from the date of manufacture under the normal storage conditions

Storage
Store in a cool and dry storage area in original sealed container

Health and Safety Information
Before handling this material Refer to the Safety Data Sheet (SDS) prior to use.

REACH Compliance:
Material is meeting the REACH compliance.

IMPORTANT! The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. No warranty or guaranty, express or implied is made regarding performance stability or otherwise. This information is not intended to be all inclusive as the manner and conditions of use, handling, storage and other factors may involve other and additional safety and performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, safe handling and use remains the responsibility of the customer.

RAJSHA CHEMICALS PRIVATE LIMITED
www.twc.in

Works:
Block No.: 637, Lamdapura Road, At. Manjusar
PO: Lamdapura, Ta: Savli, Dist. Vadodara 391 775, India
Tel – +91 9662049271
Email – office@rajsha.com

TWC Group, Corporate Office:
Hi Tech Chambers, 5th Floor, 84/1B Topsia Road (S)
Kolkata 700 046, India
Tel – +91 33 2285 1278 / 1279. Fax - +91 33 2285 1280
E mail – info@twc.in