RUBBOND® RR110

TECHNICAL DATA SHEET

Issue No
001/04

Revision Date
01.12.2022

Product - Trade Name
RUBBOND® RR110

Classification
Reinforcing Phenolic Resin
Reinforcing Phenol Formaldehyde Resin

Composition
Unmodified thermoplastic phenol–formaldehyde (PF) resins with low free Phenol and without Hexamethylenetetramine.
(Phenolic Reinforcing Resins RUBBOND Series- Unmodified Resin RUBBOND® RR-110)

Physical properties:

Parameter	Specification
Physical Form	Colourless to Yellowish pastille

Chemical Properties:

Parameter	Specification	Test Method
Sp. Gravity@25 °C	1.240±0.05	D1817
Softening Point, °C (R & B) 5 °C/min	90-120	D6493/E28
Moisture content, % (Karl Fischer)	0.5 Max	E203
Ash Content, % (@ 750 °C, 2Hrs.)	0.5 Max	D4574
Free Phenol, %	1.0 Max	D1312

Applications
RUBBOND® RR110 resin 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® RR110 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 alkyl-phenol 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® RR110 resin products should be used along with another methylene donor, such as hexamethylenetetramine(HMT)or hexamethoxy methylmelamine (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.

Health and Safety Information
Before handling this material:
- Refer to the Safety Data Sheet (SDS) prior to use
- Wear gloves, safety glasses and dust masks
- In the caseof skin contact,wash with soap and water.

Packaging
25 Kgs in HDPE laminated paper bag

Storage
Stable for one year, when stored at ambient temperature in original sealed container & in well ventilated place

Shelf Life
12 Month from the date of manufacture

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