



RUBBOND® RR90H

TECHNICAL DATA SHEET

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001/04

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01.12.2025

Product

RUBBOND® RR90H

Classification

Reinforcing Phenolic Resin
Reinforcing Phenol Formaldehyde Resin with Hexa Methylene Tetramine

Composition

Cashew nut shell liquid (CSNL) modified phenol – formaldehyde (PF) resins with Hexamethylene tetramine supplied in powder form.

Physical properties:

Parameter	Specification
Physical Form	Light to Tan Powder

Chemical Properties:

Parameter	Specification	Test Method [ASTM/RCPL]
Sp. Gravity @25 °C	1.18±0.05	D1817
HMT Content, %	6.5-8.5	IS4306/ RCPL T-07
Melting Point (Initial), °C	70-85	D1519 / T-01
IP Flow, 0.5g, 125°C, MM	50-80	RCPL T-34-C
Hot Plate Cure at 160 °C (sec)	20-50	D4640 / RCPL T42
Sieve Analysis, % (Thru 100 mesh)	99 Min	D4572/ T-12-1

General Recommendations

RUBBOND RR90H 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 RR90H 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® RR90H resin should be used 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 %.

RUBBOND RR90H resin is recommended as a reinforcing resin for NBR compounds and adhesives. With the addition of hexamethylene tetramine, RUBBOND RR90H resins impart maximum reinforcement and heat resistance properties in synthetic elastomers, especially NBR compounds and adhesives.

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 case of skin contact, wash with soap and water.

Packaging

25 Kgs. In HDPE laminated in 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

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.

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