

Indorez® Kota Resin



PRODUCT IN FOCUS



Indorez® Kota Resin

INTRODUCTION

Indorez® Kota Resin is a modified non self-cured phenolic resin, it can increase rubber adhesion to steel, polyester, rayon, nylon, aramid and other fabric cord. It's an adhesive agent, acts as methylene acceptor, **can 100% replace resorcinol** and resorcinol resins in resorcinol-formaldehyde-silica, enhance adhesion between rubber and reinforcing materials.

It can substantially reduce fumes and weight loss compared to resorcinol; Kota is more environmentally friendly than resorcinol. Compared to RE and RF, KOTA is anti caking and with good storage stability, helps to reduce labor cost. It requires a methylene donor, e.g. HMMM or HEXA to complete the reaction and become thermoset.

This resin is mainly used by tyre manufacturers, hose manufacturers, conveyor belt manufacturers, textile-reinforced rubber product manufacturers.

APPLICATIONS

❑ Rubber Industry

- KOTA Resin is primarily used to improve the adhesion between rubber compounds and various reinforcement cords. It enhances bonding with steel, polyester, rayon, nylon, aramid and other fabric cord.
- KOTA Resin is used by manufacturers of: Tyres, Conveyor belts (Textile and steel-cord belts) Industrial hoses, V-belts, timing belts & transmission belts, Rubberised fabrics and coated textiles, Rubber composites requiring strong interlayer bonding.
- KOTA Resin is often incorporated in RFL (Resorcinol-Formaldehyde-Latex) dip formulations to increase bonding strength

❑ Others

- Kota resins have diverse applications across industries, including the production of high-pressure laminates for countertops, a binder for brake linings and clutch facings in the automotive sector, and electrical insulation for components like printed circuit boards.
- They are also used in construction materials like plywood and particleboard, as adhesives for wood products, and as protective coatings due to their excellent heat, chemical, and water resistance.
- They also find applications in hot melt traffic paints, coatings & primers, lamination adhesives, abrasive products.

PROCESSING ADVANTAGES:

- Compatible with common rubbers like NR, SBR, BR, NBR
- Works in both dipping and compounding processes
- Provides consistent bonding during vulcanization
- Improves dispersion and wetting of fibres/cords

Chemical Name

Modified Phenolic Adhesive Resin

CAS no.

9039-25-2 (Formaldehyde, polymer with methylphenol and phenol)

EINECS no.

618-543-2

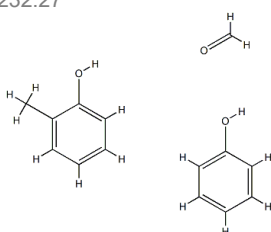
Molecular formula

C₁₄H₁₆O₃

Molecular weight

232.27

Structure



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SPECIFICATIONS

Test	Unit	Specification
Appearance	-	Light red to reddish brown
Form & Odour	-	Solid Granules & Odourless
Softening point	°C	90.0 – 105.0
Decomposition Temperature	°C	NLT 200
Heating loss (105°C, 2h)	%	NMT 2.0

STORAGE

Keep cool (approximately 25 °C) and dry in closed original packaging

PACKING

25 kg paper plastic bag

REACH Status

Registered

ExSyn offers Kota Resin on commercial scales and welcomes enquiries. No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice! If you need any additional information or SDS, please contact us.