



RISHABH RESINS & CHEMICALS

(AN ISO 9001:2015 CERTIFIED COMPANY)

Plot No. 15 E & F, SVCIE, IDA JEEDIMETLA,
HYDERABAD - 500055, (TS)

Ph No : 040-40213105 | (+91) 9391023105 | (+91) 9100953109

GST NO : 36AAMPJ0213G1Z4

Email : rishabhresins@gmail.com, nilesh@rishabhgroup.com ||
Website : www.rishabhresins.com



TECHNICAL INFORMATION ON RESIDOL

RESIDOL-PARTIALLY POLYMERISED CASHEW NUT SHELL LIQUID (CNSL)

Residol is a very viscous, dark substance. It is partially polymerized CNSL (Cashew Nut Shell Liquid) obtained in the distillation process of technical CNSL (TCNSL), after separation of the monohydroxyl derivative of phenol (Cardanol).

The active constituent of CNSL is a meta substituted phenol with long hydrocarbon side chain which on account of its unique molecular structure imparts to CNSL many useful properties leading to its manifold uses in the manufacture of oil soluble resins, varnishes and paints, friction dusts and chemical resistant linings, rubber compounds, bonding resins, adhesives etc.,

For most of the above applications, CNSL has to be partially polymerized to a thick viscous liquid consistency which generally is a time consuming and laborious process. We are preparing Residol, the bodied material from CNSL, through the action of heat only without using any catalyst. This avoids contamination with other chemicals which may interfere with its ultimate use.

Residol contains a natural phenol derivative, which allows easy condensation. A layer of varnishes, enamels and paints made of Residol, dries and hardens both in ambient and baking conditions. Such surfaces have a high gloss, good hardness and elasticity, resistance to water, diluted alkalis, acids, common organic solvents and have particularly good corrosion resistance.

Residol is a relatively cheap material and can partially or completely replace linseed oil and other drying oils and resins in protective coating compositions that do not require bright surfaces.

Residol is used for brake pads in the form of friction dust and in core casting as an oil binder.



RISHABH RESINS & CHEMICALS

(AN ISO 9001:2015 CERTIFIED COMPANY)

Plot No. 15 E & F, SVCIE, IDA JEEDIMETLA,
HYDERABAD - 500055, (TS)

Ph No : 040-40213105 | (+91) 9391023105 | (+91) 9100953109

GST NO : 36AAMPJ0213G1Z4

Email : rishabhresins@gmail.com, nilesh@rishabhgroup.com ||
Website : www.rishabhresins.com



::2::

PROPERTIES:

Residol has the following general characteristics:-

Molecular weight	:	Between 1000 to 1500
Viscosity at 30°C	:	Between 15000 to 20000 poises
Gel Time	:	Less than 5 minutes with catalyst.
Iodine value (wijs)	:	Between 180 to 210
Hydroxyl value	:	Between 210 to 230
Colour	:	Dark brown to black

APPLICATIONS:

Residol is comparatively a cheap material and can partly or wholly replace Linseed oil and other drying oils and resins in coating formulations where light colour is not a consideration. It retains its Phenolic character and can be condensed.

The film of varnishes, enamels and paints, formulated from Residol, dry hard either under ambient conditions or on baking. Such films have proved to have high gloss, good hardness and flexibility, resistance to impact, water, dilute solution of alkalies and acids and common organic solvents.

It is advised that basic pigments are not ground with Residol based medium. Such reactive pigments can be added after the grinding process is almost over allowing slight grinding for proper dispersion.

Residol is also a very suitable raw material for use in the manufacture of chemical resistant tiles and cements, adhesives, brake lining dusts and resins etc. Its use with rubber compounds improves their process ability, ageing properties, abrasion resistance to oil and above all reduces the cost.



RISHABH RESINS & CHEMICALS

(AN ISO 9001:2015 CERTIFIED COMPANY)

Plot No. 15 E & F, SVCIE, IDA JEEDIMETLA,
HYDERABAD - 500055, (TS)

Ph No : 040-40213105 | (+91) 9391023105 | (+91) 9100953109

GST NO : 36AAMPJ0213G1Z4

Email : rishabhresins@gmail.com, nilesh@rishabhgroup.com ||
Website : www.rishabhresins.com



::3::

SOME OF ITS MAIN APPLICATIONS ARE AS BELOW:

- (1) **RESIDOL – DRYING OIL VARNISH:**
- (2) **RESIDOL – DRYING OIL – ESTER GUM VARNISH:**
- (3) **RESIDOL – DRYING OIL – MODIFIED PHENOLIC RESIN VARNISH:**
- (4) **ALUMINIUM PAINTS:**
- (5) **RESIDOL-ALKYD VARNISH:**
- (6) **SEWING MACHINE & CYCLE ENAMEL:**
- (7) **ZINC CHROME-IRON PRIMER AS PER IS: 2074 :**
- (8) **BRAKE LINING DUST COMPOSITION (Friction Dust Powder):**
- (9) **CHEMICAL RESISTING TILES & CEMENTS:**
- (10) **ADHESIVE FOR INSULATING TAPE AND CABLE CLOTH:**