BASF
The Chemical Company

JONCRYL® 1537

Key features and benefits

- adhesion to various metals
- good corrosion and humidity resistance
- early water resistance
- high hardness

a rheology controlled acrylic emulsion polymer for high gloss, fast drying industrial metal and plastic coatings and interior decorative paints

General information

Typical physical characteristics (not to be considered specifications)

appearance	translucent emulsion
solids by weight	46%
solids by volume	43%
viscosity at 25° (Brookfield)	250 mPa.s
specific mass as supplied	1,050 kg/m^3
specific mass solids	1,110 kg/m^3
pH	8.4
acid value (solids)	49 mg KOH/g
pre-neutralisation	approx. 89% (ammonia)
glass transition temperature Tg (DSC)	46 °C (115 °F)
minimum film-forming temperature	45 °C (113 °F)
freeze/thaw-stable	yes

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supersedes C J 1537e/12-04-2005/B1

Applications

JONCRYL® 1537 is an excellent vehicle for general and special purpose industrial coatings especially when corrosion protection is required.

Performance

JONCRYL® 1537 is a Rheology Controlled (RC) acrylic emulsion that offers many distinct advantages to protective coatings. JONCRYL® 1537 exhibits good early water resistance and excellent adhesion to a wide range of metals and plastics due to the free carboxylic groups present. It has a good resistance against humidity and corrosion.

Formulation guidelines

Coalescing

To achieve good film formation, it is necessary to have sufficient coalescing solvent present after most of the water has evaporated. JONCRYL® 1537 has been shown to form a good film at room temperature when levels of appr. 10-13% on JONCRYL® 1537 (as supplied) coalescing solvent are used. As drying conditions become more severe (below 15°C and/or above 70% relative humidity), slower evaporating and/or hydrophobic solvents (e.g. Texanol[1], Dowanol[2] DPnB) will be required to achieve good film formation.

For anti-corrosive primers we recommend the use of a plasticizer, e.g. Dioctyladipate in combination with coalescing solvents.

Foam control

We recommend:
Dehydran[3] 1293
BYK[4] 020, 024, 045

Thickening

JONCRYL® 1537 will formulate to a high viscosity without thickener addition. If a further increase in viscosity is desired, we recommend for Newtonian rheology behaviour (brush application) DSX[3]-1514 or Acrysol[5] RM 2020. For spray application (pseudoplastic rheology) we recommend DSX[3]-3290, DSX[3]-1550 or Tafigel[6] PUR 60.

Pigment dispersion

JONCRYL® 1537 provides the opportunity to grind in the emulsion with the addition of low levels of pigment dispersant, due to its excellent shear stability.

We recommend:
Disperse[7] Ayd W-22
Hydropalat[3] 3216
Nuosperse[7] FX600
Tego Dispers[8] 745

For more information about JONCRYL® 1537 as a binder for water-based acrylic anti-corrosive primers, see our product review which is available upon request.

Safety

When handling these products, advice and information given in the safety data sheet must be complied with. Further, protective and workplace hygiene measures adequate for handling chemicals must be observed.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.

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BASF Resins B.V.
P. O. Box
8440 AJ Heerenveen, The Netherlands
Phone +31 513 619 619
Fax +31 513 619 600
resins@basf.com
www.basf.com/resins