INOLUB™ Fluoropolymer Additives

Just like the spices so essential in that perfect recipe, Inolub™ fluoropolymer additives are the ingredients that enable critical performance in the most demanding applications. Whether it's high temperature grease, a rub resistant ink or coating, a plastic conveyer chain, high transparency food packaging film, or a television housing meeting stringent fire regulations – we have the right ingredients to ensure success.

Inolub™ is primarily about movement: Ideas on the move to keep your product in motion – like a plastic gear, or multiple molten polymer streams flowing together into a single plastic film – or perhaps, “putting the brakes on” and preventing fire spread – by arresting molten flaming droplets from plastic items in a blaze.

Do you need a lubricant, processing aid, or thickener? Take a look at our portfolio:

INOLUB™ FLUOROPOLYMER ADDITIVES

**INOLUB™ T SERIES**

- **PTFE Micropowders**
  - Range of micropowder grades tailored to a broad range of applications
  - Modification of properties (lubricant effect)

**INOLUB™ P SERIES**

- **Polymer Processing Additive**
  - Range of fluoropolymer based extrusion aids
  - Characteristics of end product ensured via process improvement

**INOLUB™ R SERIES**

- **Rheology Modifier**
  - Range of fluoropolymer based additives designed to increase polymer melt viscosity.
  - Melt strength enhancement and drip suppression (under fire conditions)

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**About the company**

Gujarat Fluorochemicals Limited

Gujarat Fluorochemicals Limited (GFL) was incorporated in 1987 and is listed on BSE & NSE – the two main stock exchanges in India. It is a part of the multi-billion US$ INOX Group of Companies. INOX Group is a family owned, professionally managed business group, with market leadership in diverse businesses including fluoropolymers, industrial gases, refrigerants, specialty chemicals, cryogenic engineering, renewable energy, FMCG and entertainment.

GFL operates a backward-integrated fluoropolymer manufacturing facility at Dahej in the western state of Gujarat. Supported by our own mines of fluorspar along with integrated captive supply of power, chlorine, chloroform, HCFC22 and TFE, we have the distinction of being highly self-sufficient with respect to all our inputs.

GFL strives to provide quality products and services in the most efficient manner to its global clientele. Today, GFL’s modern manufacturing facility, well equipped QA & research centre and global reach have enabled the company to become the preferred supplier in quality conscious markets.

We manufacture fluoropolymer resins and dispersions (PTFE, FEP & PFA), and fluoroelastomer (FKM), which are available in various grades to meet specific application requirements.

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INOLUB™ T SERIES

Gujarat Fluorochemicals has successfully developed manufacturing processes to bring you a versatile range of PTFE micropowders – Inolub™ T. The high dispersibility of these products confers the classic low coefficient of friction characteristics of PTFE, enhancing the properties of a variety of substrates including thermoplastics, thermosets, inks, paints, coatings and elastomers.

Inolub™ T is typically used at concentrations ranging from 1 to 20%, dependent on application, some of which include thermoplastic gears, floor varnishes, lithographic inks, dynamic seals, industrial liner coatings, polymer waxes and greases.

With investments in state-of-the-art manufacturing technologies, which also employ eco-friendly and sustainable techniques, GFL is developing an unrivalled range of PTFE micro-powders. We invite you to put our dependability and innovative capabilities to the test. Our extensive fluoropolymer experience enables us to provide effective technical service and development support to a rapidly expanding global customer base.
INOLUB™ P SERIES

The Inolub™ P series is a range of fluoropolymer based processing additives that can be incorporated in very low concentrations as extrusion processing aids - primarily in LLDPE, mLLDPE, and other polyolefins. It helps meet the ever increasing demands of film performance without compromising extrusion capabilities.

**INOLUB™ P SERIES APPLICATIONS**

INOLUB™ P501F  |  INOLUB™ P402F  |  INOLUB™ P502F  |  INOLUB™ P401F
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Typical effective concentration can be as low as 100 ppm | Typical effective concentration can be as low as 160 ppm | Typical effective concentration can be as low as 200 ppm | Typical effective concentration can be as low as 50 ppm
Can be used in high temperature processes e.g. cast film | High performance product, primarily for blown film | Standard product, primarily for blown film | Premier grade for use in presence of interfering additives, e.g. HALS
Melt Fracture elimination for high clarity and gloss | Melt Fracture elimination for high clarity and gloss | Melt Fracture elimination for high clarity and gloss | Melt Fracture elimination for high clarity and gloss
Lubricates die and reduces die build up | Lubricates die and reduces die build up | Lubricates die and reduces die build up | Lubricates die and reduces die build up

*All our Inolub™ P Series grades are FDA/EU Compliant*

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INOLUB™ R SERIES

Our series of high molecular weight PTFE based additives designed to increase melt viscosity. They are effective at low concentrations, and typically are used to contain fire spread by the elimination of flaming droplets falling from plastic articles. As a drip suppressant additive, they are typically combined with flame retardants, generally in low enough concentrations that a polymer may be classified as "zero halogen". In addition, this product class is used to enhance melt strength of difficult to process polymers.

They may be successfully incorporated directly, provided that special handling conditions are employed, or more easily by first incorporating into a masterbatch.

**INOLUB™ R SERIES APPLICATIONS**

INOLUB™ R740F  |  INOLUB™ R850F  |  INOLUB™ R640F
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Standard Product  |  Easier handling  |  Easier handling
Avg. particle size of 500 micron  |  Avg. particle size of 200 micron  |  Avg. particle size of 20 micron
Dispersible particle  |  Discrete particle with good powder flow  |  Discrete particle with good powder flow

The Inolub™ R series is most widely used as a drip suppressant in flame retardant polymers for housings in business machines and household electrical appliances, as well as electronic components.