



ABOUT US LAYADRAH ENGPOLBLENDS PVT. LTD.

Layadrah Engpolblends Pvt. Ltd. (LEPL) is a new venture built on the strong legacy of our esteemed sister concern, Hardayal Polymers, a trusted name in plastic compounding and recycling for over 15 years. Leveraging Hardayal's proven technical expertise, industry credibility, and customer-centric values, LEPL marks a significant leap forward driven by the vision to deliver innovative, high-quality polymer solutions to diverse industries.



Layadrah Engpolblends Pvt. Ltd. (LEPL) is a forward-thinking engineering thermoplastics company dedicated to developing high-performance, sustainable compounds for industries worldwide. Incorporated in 2025 and ISO 9001:2015 certified, LEPL leverages cutting-edge compounding technologies to deliver proprietary brands LAYONATE™, LAYSOLAC™, LAYALLOY™, LAYMIDE™, LAYSTER™, LAYCETAL™ and LAYPROLENE™ each engineered for precision, durability, and environmental responsibility.



Innovation-Driven.
Sustainability-Focused.
Performance-Centric.
A new era of
engineering polymers
starts here.

OUR PRODUCTS

At the heart of innovation, our LAY-series delivers high-performance thermoplastics engineered for demanding applications across automotive, electronics, industrial, and consumer sectors. From impact-resistant polycarbonate to precision-formulated acetal, each compound is optimized for mechanical strength, thermal stability, processability, and aesthetic excellence.

Explore Our Range:

LAYONATE™

Optical-grade Polycarbonate for high-impact clarity and heat resistance

LAYSOLAC™

Durable ABS with excellent moldability and aesthetic adaptability

LAYALLOY™

Balanced PC/ABS blend for toughness and dimensional precision

LAYMIDE™

Reinforced Nylon for wear resistance and structural performance

LAYPROLENE™

Versatile Polypropylene with chemical resistance and fatigue durability

LAYSTER™

Precision-molding PBT for tight-tolerance and electrical applications

LAYCETAL™

High-precision Acetal (POM) for low-friction, motion-driven systems





LAYONATE ™

LAYONATE ™ is a high-performance polycarbonate known for its strength, clarity, and durability. With excellent impact resistance, high heat tolerance, and dimensional stability, it delivers both performance and aesthetics across demanding applications.

KEY PROPERTIES:

- Outstanding mechanical strength
- High optical transparency
- Superior heat and impact resistance
- · Precision dimensional stability
- Available in reinforced and flame-retardant grades







Medical & Healthcare Devices



Green Energy & E-Mobility



Automotive Solutions



Defence Technology

LAYSOLAC ™

LAYSOLAC™ is a high-performance ABS polymer that combines rigidity, impact strength, and thermal stability. Durable and easy to mould, it offers excellent surface quality, colorability, and compatibility with finishes like painting, plating and laser marking.

KEY PROPERTIES:

- Strong and impact-resistant, even at low temperatures
- Superior surface finish and gloss
- Excellent dimensional stability with low warpage
- Compatible with coatings and metal plating
- Versatile for automotive, electronics, and appliance applications





Electronics & Device Casings



Medical Enclosures & Diagnostic Housings



Packaging with Structural Strength



Automotive Solutions



Home Appliances

LAYALLOY ™

LAYALLOY™ combines the strength and heat resistance of Polycarbonate with the impact performance and processability of ABS. This balanced blend delivers toughness, dimensional stability, and excellent surface finish, making it ideal for demanding yet design-sensitive applications.

KEY PROPERTIES:

- High impact resistance, even at low temperatures
- · Superior thermal stability and rigidity
- Excellent mouldability and surface aesthetics
- Efficient processing with reduced cycle times
- Balanced cost-to-performance ratio









Automotive Interior
& Trim

Consumer Devices

Industrial Equipment



LAYMIDE ™

LAYMIDE™ is a high performance polyamide known for its strength-to- weight ratio, abrasion resistance, and thermal endurance. It delivers mechanical reliability under load, dimensional stability, and durability in demanding environments.

KEY PROPERTIES:

- High tensile strength and fatigue resistance
- · Excellent abrasion and wear resistance
- Self-lubricating with low friction
- Thermal and chemical stability
- Available in reinforced and modified grades



Automotive Interiors & Trim



Electronics & Smart Devices



Consumer & Household



Industrial Equipment



Electronics & Smart Devices

LAYSTER ™

LAYSTER™ is a high-performance polyester thermoplastic designed for precision molding and demanding environments. With low moisture absorption, excellent dimensional stability, and superior electrical insulation, it ensures reliable performance in automotive, electrical, and electronic applications.

KEY PROPERTIES:

- High mechanical strength and rigidity
- · Outstanding dimensional stability, even in humidity
- Superior electrical insulation
- · Excellent chemical and heat resistance
- Available in reinforced and flame-retardant grades









Appliances & Consumer A
Products

Automotive Medical & Healthcare



LAYCETAL™

LAYCETAL™ is an advanced acetal polymer that combines metal-like rigidity with lightweight efficiency. Known for its wear resistance, low friction, and dimensional stability, it is ideal for gears, bearings, moving parts, and precision components in automotive, industrial, and appliance applications.

KEY PROPERTIES:

- High strength and stiffness with low weight
- Excellent wear resistance and low friction
- Superior dimensional stability under load
- Outstanding creep resistance and durability
- Available in unfilled, reinforced & lubricated grades



Automotive









Industrial



Automotive Applications



Industrial Equipment

LAYPROLENE ™

A lightweight, versatile polypropylene compound with excellent chemical resistance, fatigue durability, and cost-effectiveness. Its low density and easy processability make it ideal for weightsensitive applications.

KEY PROPERTIES:

- High resistance to acids, alkalis, and solvents
- · Low moisture absorption & excellent electrical insulation
- Thermal stability (melting point 160–170°C)
- Superior fatigue resistance, ideal for hinge designs
- Can be reinforced or modified for stiffness, flame retardancy, or impact strength





Automotive Interiors & Trim



Electronics & Smart Devices



Consumer & Household



Household Goods



Automotive

MARKET & GROWTH



"Engineering Plastics to Reach USD 251 Billion by 2030, Growing at a CAGR of 10.2% with Asia-Pacific Holding 45% Market Share"



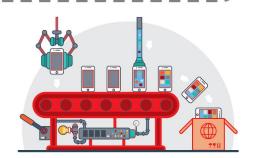


AUTOMOTIVE & MOBILITY

"By 2030 Plastics Will Account for Nearly 15% of Total Vehicle Weight Enabling Fuel Savings of up to 8%"



"Electronics Sector to Become the Fastest-Growing End-Use With Engineering Plastics Demand Rising at 11% CAGR Through 2030"





CONSTRUCTION & INDUSTRIAL

"Plastics in Construction Projected to Save 35% of Building Energy Costs Through Advanced Insulation Materials"



"Recycled Plastics Market Projected to Reach USD 77 B by 2030 Growing at 9 % CAGR; Circular Economy and Green Regulations Drive Rising Adoption."





RENEWABLE ENERGY

"High-Performance Plastics Powering Renewable Energy Systems; Lightweight Polymers Enable Longer Wind Turbine Blades and More Durable Solar Panel Components."



MANUFACTURING FACILITIES

Where Material Science Meets Industrial Precision

At Layadrah Engpolblends Private Limited (LEPL), we merge advanced material science, disciplined process control, and collaborative innovation to deliver premium-grade thermoplastics. Our facility is purpose-built for both standard and highly specialized polymer compounding-ensuring performance that meets real-world industrial demands.

OUR STRENGTHS

- World-Class Engineering Polymer Compounding Scalable, versatile production across a wide polymer base.
- Advanced Machinery & Lab Equipment
 Twin-screw extruders, universal testing systems,
 and precision lab instruments for consistent quality.
- Material Optimization Expertise
 Tailored base polymer and modifier combinations for exact mechanical, thermal, and aesthetic performance.

PRODUCTION EXPERTISE

- Glass Fiber, Mica & Mineral-Filled Grades
- Halogenated & Non-Halogenated Flame Retardants
- Impact-Modified Compounds for high shock resistance
- UV-Stabilized Grades for outdoor durability
- Highly Filled Compounds up to 60% filler content
- Hybrid Grades combining fillers & modifiers

FACILITY INFRASTRUCTURE

Feature Specification Total Area 1,10,000 sq. ft.

Extruders Advanced Twin Screw Lines

Production Capacity 4,800 MT annually
Total Workforce 25+ Skilled Personnel

IN-HOUSE LAB & QUALITY TESTING

- Universal Testing Machine (UTM)
- Melt Flow Index (MFI) Tester
- Moisture Content Analyzer
- Density & Weighing Systems
- IZOD Impact Tester & Notch Cutter
- 80-Ton Injection Molding Machine
- Muffle Furnace for ash content verification

COLLABORATIVE DEVELOPMENT

We engage in Joint Programs with Customers to co-create materials that meet product specifications, compliance requirements, and cost targets from concept to full-scale production.



HIGH-EFFICIENCY PRODUCTION EOUIPMENT

- Metal Separator (Ferrous & Non-Ferrous)
- High-Speed Mixer & Storage Silos
- Granulators, Shredders
- Inline Quality Control Systems







Layadrah Engpolblends Pvt. Ltd.

E-120 / 12, Savli GIDC, Manjusar, Vadodara - 391775, Gujarat (India)
E-mail: info@layadrah.com | Contact: +91 99981 98141 / 148

www.layadrah.com









