

Excellence in Polymer Compounding



PVC COLOURING COMPOUNDING & PROCESSING

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MSL GROUP CREATIVE+



PVC COLOURING COMPOUNDING & PROCESSING

Poly Vinyl Compounds | Poly Ethylene Compounds
Poly Propylene Compounds
Color master batches & Additive master batches
Thermoplastics Rubber & Elastomers | Blends & Alloys
Extruded Profiles & Sections



WHO ARE WE?

Founded in 1985, in Gujarat, PVCL is a renowned and highly trusted company providing PVC compounding solutions across the country. Over the years, PVCL has met with resounding triumph and has successfully catered to reputed companies in the vinyl business by providing compounds for exacting applications. Established under the successful leadership of Mr S.K Perkar, we have steadfastly grown in size and stature, dedicating our resources to manufacture vinyl compounds.

Within a span of 3 decades, we have added a series of high performing custom Vinyl compounds and Polymer compounds along with several other value addition products such as flame retardant, anti-stat, ESD, structural, wear resistant and TPE materials for injection, extrusion, blow moulding and rotational moulding applications to our range of products.

Our quality governance is exemplified with the wealth of experience we have in the field of PVC compounding. We adhere to stringent quality standards to comply with demanding international regulatory needs our unrelenting commitment to customer satisfaction has resulted in us attaining the ISO-9001: 2008 certification.

At PVCL, we envisage scaling new heights through a robust and fully equipped state-of-the-art in-house laboratory and advance manufacturing facilities. Backed by a strong team of highly enterprising TQM personnel who have introduced a host of innovative products, we aim to usher in a new age of expansion under the wide spectrum of compounding solutions.

As an organization, PVCL takes pride in being an environmentally conscious company, and we have vigilantly taken care of the properties, performance and/or content of manufacturing materials to ensure minimal hazardous impact to the environment, including lowering carbon emissions and maximizing the use of earth's limited resources.



OUR MISSION

Our mission is to consistently deliver excellence in the field of PVC compounding solutions, by responsibly providing innovative products and services to our ever increasing array of customers, through scientific, technical and commercial expertise.

OUR VISION

To enable the organization to rapidly adapt to the constantly changing world by our two-fold strategy: strengthen leadership in all of our activities and persistently develop our competitiveness and ability to innovate.

OUR PILLARS (MANAGEMENT)

Today, under the dynamic stewardship of our chairman and MD, Mr Girish Perkar, PVCL has managed to summit new heights and attain the status of being one of India's reputed polymer compounds manufacturing company. Under his firm leadership and guidance the company has been relentlessly widening its horizon under the spectrum of compounding solutions and branching out into newer and exciting areas of business.

The highly qualified, dedicated and technically sound team who is in charge of the business operations and innovation centres is the backbone of PVCL.



OUR PROMISE (QUALITY ASSURANCE)

At PVCL, we strictly adhere to Quality Control and Compliance requirements and ensure the quality of every product, right from the production process to the finished product. Our state-of-the-art plant is fully-equipped with the latest machinery and equipment. We have the most advanced laboratory to ensure that the quality of our products is never compromised. Through our Total Quality Management (TQM) initiative, we are determined to deliver innovative and high quality products to our clients at reasonable costs and within the committed timeline.

Our organization embodies the practice of in-house material testing to warrant that each commodity manufactured is in compliance with the physical, mechanical and physicochemical properties, which thermal stability, specific gravity substantiate efficient polymer compounding. PVCL also engages in verifying features such as surface hardness, K value, ester content and more, in all its products. Moreover, our products are manufactured in an environmentally controlled production area, to ensure that quality and hygiene of the products is maintained.

Electrical Properties	Physical/Mechanical Properties	Physio-Chemical Properties (for medical grade)
Oxygen Index (LOI) Temperature Index Halogen Acid Emission test Thermal Stability Ageing Oven test at 10days I.R Value V.R Value Smoke Density test Loss of Mass	Elongation at Break Tensile Strength Hardness (Shore A/D) Sp. Gravity (g/cc) ESCR Melt Flow Index Oil Resistance Izod Impact Test Vical Softening Point	Heavy Metal test Light Absorbtion test Oxydisable Substances Difference of PH Non volatile Matter Chlorine Content

CSR (COMPANY'S SOCIAL RESPONSIBILITIES)

We have, over the years, nurtured a well-organized working structure with constant two-way communication between the team and management. We are committed to empowering our employees as well as the society at large. We have undertaken several initiatives that benefit our people and the community.

Some of PVCL's initiatives include:

- Accommodation facilities for employees within the vicinity of the workplace
- Academic scholarships for employees' children
- Interest-free loans to employees in need of financial aid
- Giving support in welfare activity of worker for their family upliftment
- Training sessions to educate employees on health and safety measures



OUR INFRASTRUCTURE



OUR TECHNOLOGY

At PVCL, we have always endeavoured to provide our customers with latest and high-quality products that cater to their requirements, and hence, we have always dedicated our resources on upgrading newer and better technologies, that help serve our clients in the best way. We have an array of cutting-edge technologies that were installed at our facility with the objective of catering to a wide portfolio of compounds for diverse industry segments.

Our units are equipped with the following systems to ensure efficient manufacturing :

- The newly and advanced Liquid Dosing and Weighing system
- The latest High-Speed Mixer
- Twin Screw Imported Extruder for PVC Compounding
- Single Screw Extruder for PVC Compounding
- Dedicated line for medical & food grade compounds with clean room facilities
- Extrusion, co-extrusion, irradiation & expansion systems



OUR RESEARCH & DEVELOPMENT

We have an integrated and advanced Research and Development (R&D) department with leading industry professionals working in modern, state-of-the-art product development laboratories, for developing, testing and manufacturing innovative value-added products that meets the specific requirements of our customers. Our professionals are available round-the-clock providing assistance to customers for developing tailor-made formulations that comply with their specifications.

Fully-equipped with cutting-edge analytical and testing instruments, our laboratories best serve our clients' requirements. Our researchers work within the ISO 9001 norms using equipment attuned with the established reference standards, in order to precisely quantify composition, obtain physical properties and determining optimal formulations that not only meet our clients' expectations but also surpass them.

Specialised Services of R&D

Apart from conducting research and development in various fields, research and development team at PVCL provide following specialized services :

- Feasibility studies for a new project, product or technology
- Adaptation of imported technology evaluation of a technology
- Product differentiation
- Opinion report on product, application, technology, project etc
- Status study
- Literature survey, market survey

PVC COMPOUNDS

The success of PVCL is attributed to its customer first approach that has led to the strengthening of our relationship with them resulting in the expansion of our customer base. We are proud to say that today, for new and emerging requirements, we are our customer's first choice.

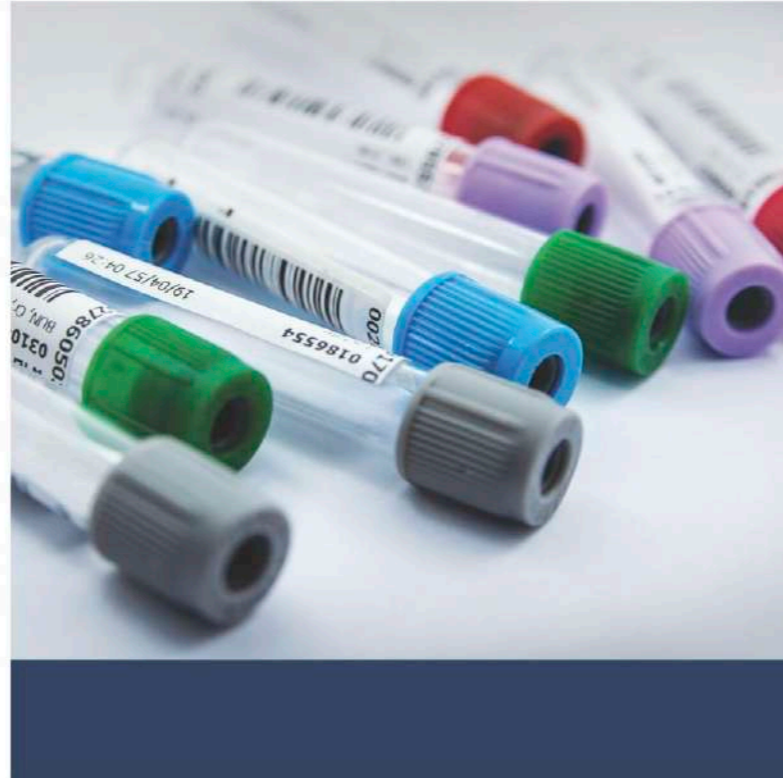
PVC MEDICAL COMPOUNDS

Three decades of experience in extrusion of plastic materials have made PVCL an important partner for medical, food grade and pharmaceutical industries.

PVCL has flexible, semi rigid & rigid PVC compound that meets the performance and cost requirements for the successful design of various medical products. We produce our medical grade compounds in totally dedicated & controlled environments that prevent incidental contact with non-medical materials.

We offer non-DEHP, non-phthalate, non-migratory, low-odor PVC compounds for various medical end product applications according to toxicological & biological parameters. Our medical grade PVC compounds are dry feel, gel free, heavy metal free, & crystal clear for different durometer hardness.

Compounds conforming to various national & international standards are available for blood bags, urine drainage bags, dialysis kits, catheter tubings, drip chambers, oxygen mask, connectors, closures, syringe gaskets, seals, lures etc..



Gamma sterilization/ e-beam resistant compounds :

We provide gamma or E-beam irradiation to sterilise medical devices. Color retention in PVC compounds after radiation is a challenging job but we provide solutions that help retain the compound's physical properties.

PVC Alloys and Blends: We produce alloys of PVC with polyurethane or nitrile rubber to enhance properties like hot melt strength for blow moulding medical devices, abrasion resistance and ultimate elongation.

Conductive and Anti-Static Compounds : We manufacture conductive and highly anti-static PVC compounds for medical applications where static charge is a matter of concern

High performance PVC compounds : High flexibility elastomeric PVC compounds that is used for peristaltic pump tubing, non-kink tubing, blow-molded parts, and other applications where high performance properties are required come under this category. Low temperature flexible compounds, high mechanical strength compounds & compression set resistance, are characteristics of this series.

We have a broad range of alternatively plasticized compounds for applications where the functional requirement is dependent on a specified plasticizer preference.

For X-ray opaque applications in certain catheters & tubing, we offer compounds that have selective concentrations & colour options.



MEDICAL TUBINGS

We have a vast experience in polymer extrusion & medical grade PVC tubing for applications where tough, flexible, lightweight, clear tubing is necessary. Medical grade PVC tubing is made from some of the most versatile compounds available in the medical industry. It is extruded from non-toxic, heavy metal free materials adhering to FDA standards. Our medical Grade PVC Tubing is meeting USP Class VI standards.

We have over 15 years of experience in the medical grade tubing industry. All of our medical grade tubing is compliant with GMPs, and in our Class 100,000 clean room, ensuring manufacturing of only the best quality products. Medical Grade PVC Tubing with exceptionally smooth surface is extruded or co-extruded in a variety of shapes and lengths in clear, stock, and custom colors.

PVCL can provide medical grade PVC tubing for the following applications :

- Fluid Transfer
- Oxygen Transfer
- Catheters
- Surgical Drains
- Peristaltic Pumps

PVCL is a leader in custom medical tubing with following capabilities :

- ISO Compliant
- Tolerances to .001"
- Class 100,000 Clean Room
- Clear, Custom and Stock Colored Medical Tubing
- Custom, Cut-to-Length Medical Tubing
- Radio opaque Medical Tubing



PIPES & FITTINGS (UPVC/CPVC)

As an industry leading manufacturer of Chlorinated Poly-vinyl Chloride (CPVC) Pipe compound, PVCL has a rich legacy of manufacturing & research of 35 years. The company continues to create & develop new markets for a complete range of ISI-marked PVC & CPVC Compounds, which ensure excellent thermal stability by working in a wider window

UPVC – Unplasticized PVC for Fittings

We also offer a wide assortment of Industrial Valves Fittings which are very carefully manufactured in strict adherence to the set industrial standards and norms. Exclusively used in various simple as well as complex industrial applications, these valves & fittings are also analysed on the basis of several well-defined parameters.

CPVC – Chlorinated PVC for Fittings

We also manufacture Chlorinated Polyvinyl Chloride which is basically a kind of thermoplastic used in forming, welding and machining. This product is featured with strong corrosion resistance to corrosive chemicals at high temperature. In addition to this, our Chlorinated Polyvinyl Chloride also have fire-retardant properties.



The features of Chlorinated Polyvinyl Chloride are mentioned below:

- Resistance to fire
- Crush resistance
- Sturdy construction
- High heat distortion temperature (HDT 90°C to 110°C)
- Flame retardancy
- Low smoke generation
- Chemical resistance
- Use in molding and extrusion processes
- Custom transparent and opaque colors

PVCL's CPVC compounds serve a wide range of markets and applications, including:

- Pipe and pipe fittings – wastewater pipe, pressure pipe (industrial and residential)
- Pools and spas
- Profiles for outdoor applications such as window components
- Custom profile extrusions
- Custom-molded applications
- Electrical components
- Sheet applications requiring high flame and high temperature resistance

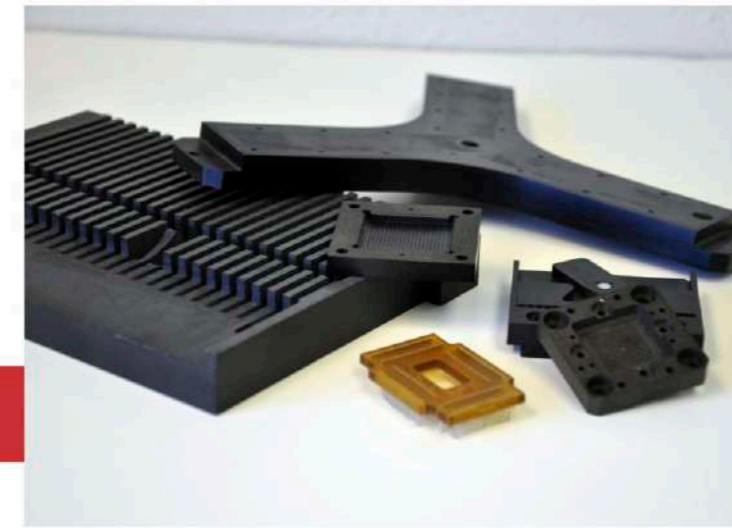


ELASTOMER COMPOUNDS

Thermoplastic Elastomer compounds combine the functional performance & properties of conventional thermoset rubbers with the processability of thermoplastics. These unique products give designers new flexibility in soft touch & ergonomic applications. They permit manufacturing rubber like articles with the speed, efficiency, & economy of injection moulding, extrusion, or blow moulding.

TPE : Thermoplastic Elastomer

PVCL combines the flexibility of rubber with the strength and processability of thermoplastics. Our thermoplastic elastomer is a versatile copolyester. It combines resilience, heat and chemical resistance with strength and durability.

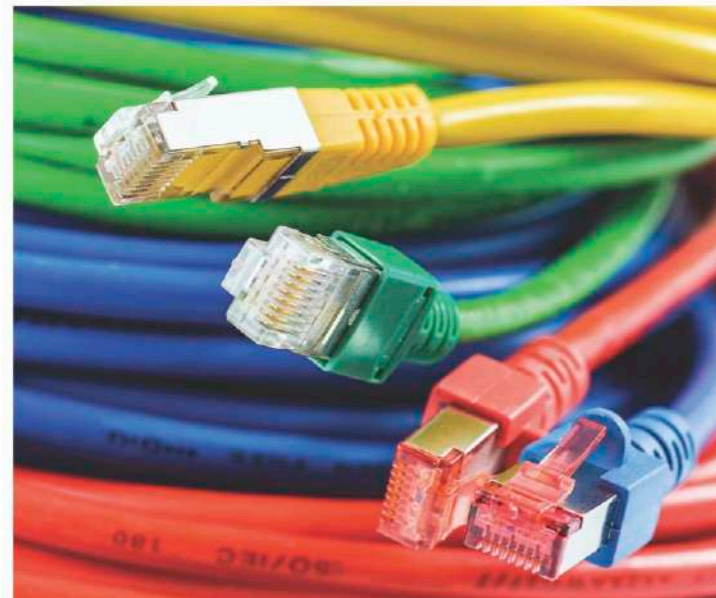


WIRES AND CABLES

PVCL has been a leading manufacturer in poly vinyl compounding industry over the years.

The most demanding product of our portfolio is PVC compounds for electrical applications, be it household wires & cables, Submersible pumps, flat & round cables, Power cables, Electronic Cables, Electric appliances wires, or Automotive wire harnesses

ROHS compliant, lead free, low smoke generating, highly flame retardant jacketing and insulating compound are designed for Plenum cable applications. Compounds exhibiting excellent processability & electrical properties for general purpose sheathing & insulation applications are most preferred compounds of this series. In specialty compounds we have UV & fungus resistant, general purpose jacketing compounds. These are high gloss surface or matte finish, flexible, oil resistance, FR compounds with good low temperature properties. All PVC electrical wire & cable compound is formulated with non-migratory/non contaminating plasticizer package.



Thermoplastic Elastomers provide

- Flexibility
- Slip resistance
- Shock absorption
- Ergonomic comfort
- Soft texture

Standalone TPE applications

- Gaskets, seals, stoppers, housings, rollers, valves, bumpers, wheels, pads, casters
- Strain reliefs, cable jacketing, switch contact points, bellows, fuel line covers, housings
- Shoe soles/heels, wrist straps, cushions, airbag doors
- Keycaps, cosmetic cases, handles, grips, pushbuttons, knobs

TPR: Thermoplastic Rubber

PVCL is a leading manufacturer of Thermoplastic Rubber (TPR) Compounds that are available for a wide-range of applications. These compounds are formulated using Styrene-Butadiene-Styrene (SBS) or Styrene-Ethylene/Butylene-Styrene (SEBS) block copolymers. These materials have many of the same properties as vulcanized rubbers, but can be molded and extruded using conventional thermoplastic process equipment. Thermoplastic processing provides advantages over vulcanized, thermo set rubbers which are processed using a slower and more costly curing process. Most of our TRP formulations are 100% recyclable and are RoHS compliant.

Some typical applications of TPR compounds are footwear products, gaskets, cable jacketing, toys, automotive applications, soft touch over-moulding and general purpose moulded goods. These compounds can be formulated to provide weather resistance, ozone resistance, low temperature flexibility as well as excellent resistance to many chemicals. They are light weight and can be colored to meet your requirements.

We look for opportunities to enhance our customer's experience; be it revolutionary new products, in-the-field support or quality assurance and testing to know that our products are optimally performing.

MASTERBATCHES

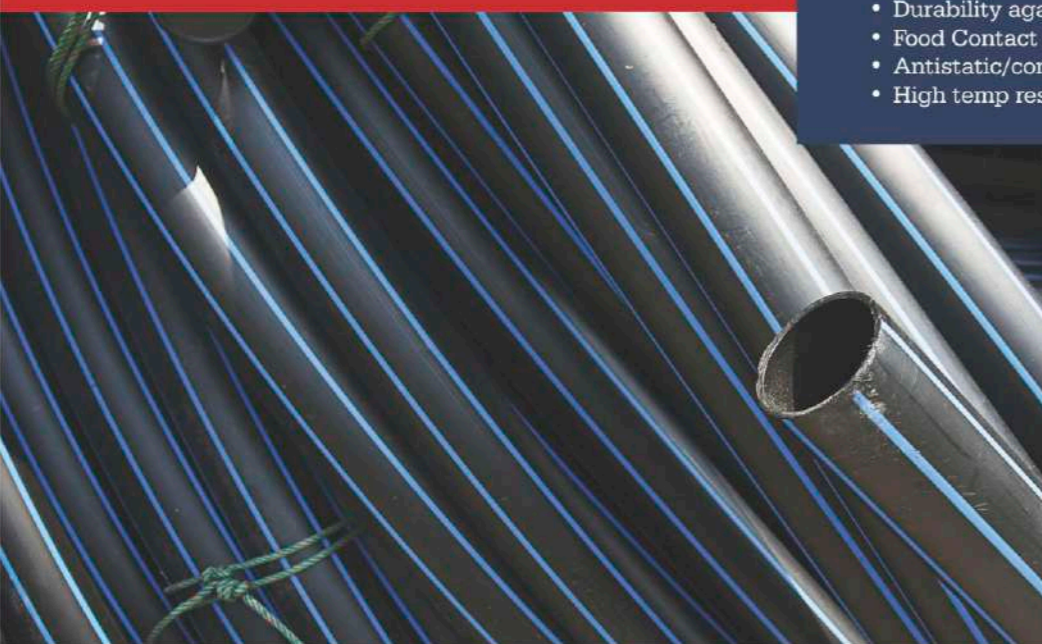
Master batch manufacturing is an art & it is a blend of technology, know how & thorough understanding of subject. Skill & familiarity of colors, fillers & additives has taken PVCL to its next level for manufacturing of black, white, color and additive master batches to meet the diverse appearance and functional requirements placed on plastic products. Today, PVCL is the leading company in master batch business & considered as one of the reputed supplier for it.

1. Black Masterbatch

As a quality manufacturer in black master batches, PVCL offers innovative formulations that provide strength and resilience to our customer's application & satisfaction. PVCL Black Masterbatches play a role in key markets such as agricultural films, irrigation systems, packaging, electronics, textiles and non woven, wires and cables, automobile, construction and toys. Our research keeps pipeline filled with steady stream of new formulations offering unique capabilities.

Our masterbatches can help you impart desirable properties like :

- Super jet black colour
- UV stability
- Durability against extreme weather conditions
- Food Contact acceptability
- Antistatic/conductivity properties
- High temp resistance



2. White master batch

White color master batch produced by PVCL has good thermal stability and excellent dispersion with quality assurance. It can be directly used with mixed resin, it does not contaminate and can be changed to any desired color. The product is made from high quality organic pigment, inorganic pigment and modifiers. Being characterized with good filtration performance, good weather resistance performance, no deviation and no turning yellow, it is particularly applicable to blown film, cast film, blow molding, plastic injection and other products. Series of white color master batches produced by the company are very proven & well accepted by the market.

Some of the key features of PVCL white masterbatches are :

- Highest opacity & whiteness
- Best product as a UV resistance
- High thermal stability
- High refractive index



3. Colour Masterbatches :

Over the years PVCL has developed a sound production and quality control infrastructure to match the stringent quality expectations of clients. An in-house laboratory and trained chemists monitor quality both at the raw material as well as finishing stages, thereby ensuring batch to batch consistency in quality as well as color specification.



Application examples :

- Houseware
- Furniture and Crates
- Film extrusion of PE/PP
- Sheet extrusion of PP/HIPS
- PE pipes
- Cables
- Injection molding
- Blow molding of HDPE
- Roto molding
- Fibre and Tape

4. Additive Masterbatch :

PVCL offers highly concentrated and efficient functional additive masterbatches to complement our broad range of color products and specialty compounds.

These masterbatches are modern formulations which maximize additive usage, providing plastics processors optimal functionality at minimum cost of usage, and are available world-wide.

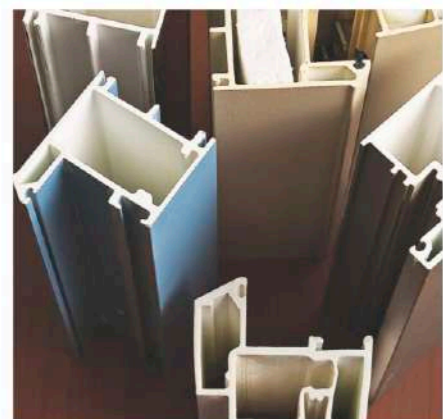
The standard range of our additive masterbatches includes :

- Antiblock - Prevents films sticking together during and after processing
- Antifog - Maintains clarity of food packaging and agricultural films
- Antimicrobial - Suppresses microbial growth on polymer surfaces
- Antioxidants - Inhibits polymer oxidation (colour/polymer degradation, gels and black specks)
- Antislip - Increases coefficient of friction to prevent slip of stacked PE bags
- Antistatic - Prevents dust pick-up and build up of static charge
- Blowing Agents - Lowers density reducing part weight leading to lower costs
- De-lustre - Gloss reduction and value adding polymer extender
- Flame Retardants - Offers varying degrees of fire resistance
- Mould Release - Prevents parts sticking in the mould
- Nucleating Agent - Improves cycle time and polymer crystallinity, foam nucleator
- Process Aids - Improves processing by reducing melt fracture leading to increased output
- UV Stabiliser/Absorbers - Prolongs life of part exposed to UV/packaging contents



PVC PROFILE COMPOUND

We offer a wide range of PVC compounds for visually attractive products designed to perform excellently under severe conditions indoors & outdoors.



Our indoor products have excellent dimensional stability, good UV resistance, good scratch resistance & very good fire retardancy.

Our PVC compounds for outdoor applications have good mechanical properties such as rigidity, impact strength & dimensional stability. It gives very good thermal stability. These compounds are used in blinds, curtains, wall portions, furniture window & door frames, decorative blinds in decorative profiles etc...

PVC AUTOMOBILE COMPOUND

PVCL's PVC Compounds for automobile are specially designed with well balanced mechanical properties, low volatile loss, very good weather resistance and good process ability.



PVC FOOTWEAR

PVCL has grown to become a premier specialty plastic compounder for the footwear industry. Our innovative PVC and TPR compounds are used for soling, mid-soling, boots, and many other footwear applications.

Our organisation's reputation in the footwear industry is the result of a commitment to use only the highest quality raw materials, thereby delivering the finest custom PVC and TPR footwear compounds. We have a variety of choices for footwear applications right from shoe uppers to soles, expandable micro fine light weight to PVC/Nitrile oil resistant compound, matt finished to glossy finished, suitable for different footwear applications. PVC compound for transparent straps & attractive coloured ladies sandals are one of the highest demanding PVC compounds in this category.



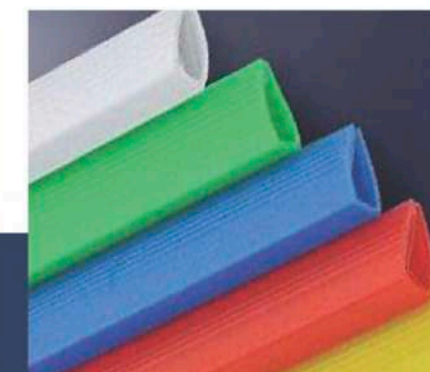
RIGID & FLEXIBLE PVC COMPOUNDS

PVCL supplies custom based rigid PVC compounds specifically developed for injection molding, extrusion or injection blow molding and sheet applications. Standard grades are available in natural, clear, or white formulations and we can supply custom compounds in a wide range of colors. Property selections include:

- Filled or unfilled
- Standard, medium, or high impact
- Medical or food grade
- High gloss or matte
- High flow
- Interior or weather resistant

Some of the applications include :

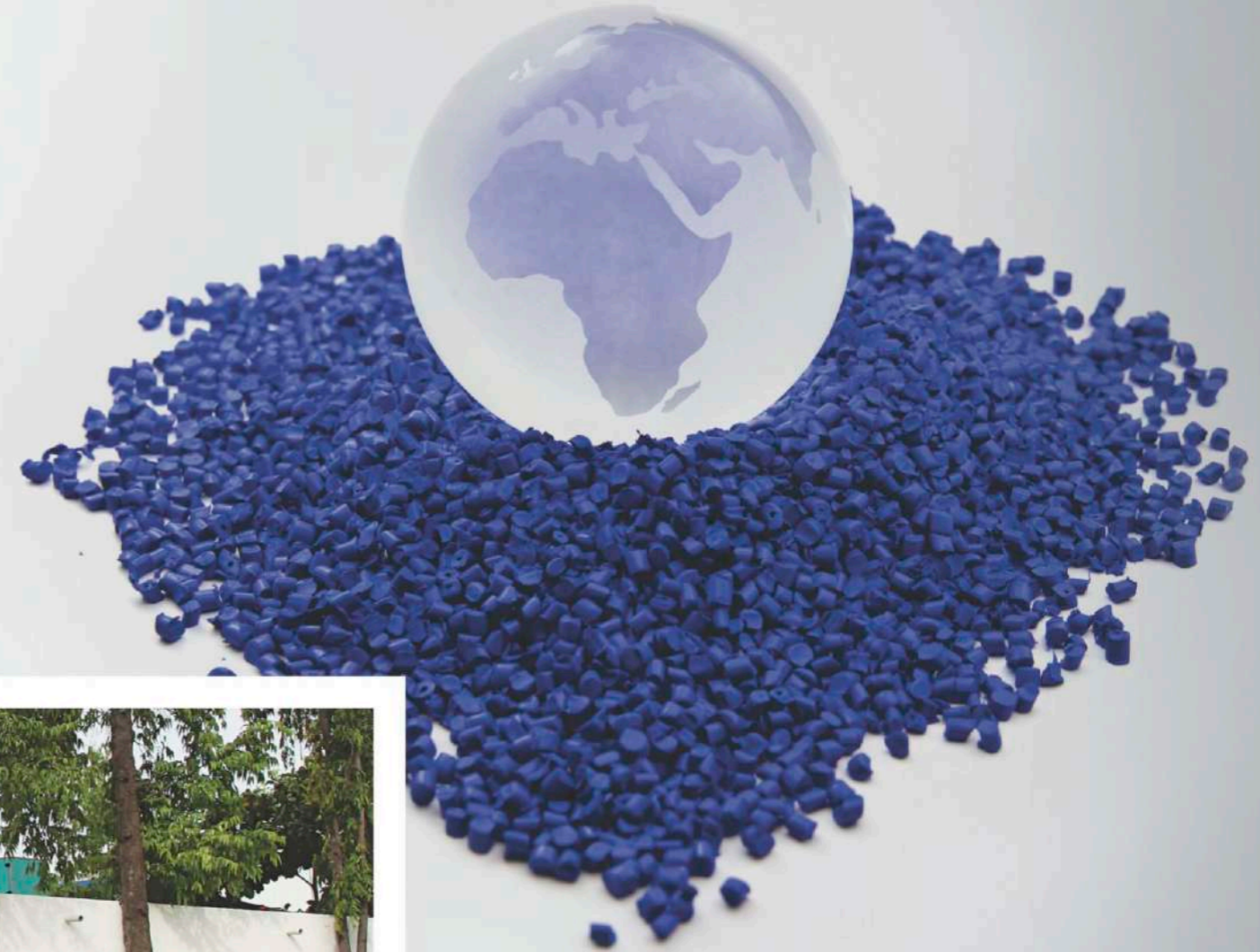
- General purpose and food grade packaging such as bottles, vials, film and sheet
- General purpose and specialty profiles such as fencing, decking, window lineal and accessories
- Electrical Applications for appliances, business equipments, computer parts, and specialty fittings
- These compounds are noted for their low odour and good early color characteristics.



CUSTOMER SERVICE EXCELLENCE

We strive to implement critical initiatives that help us move closer to our vision. Our priority is to deliver operational excellence and customer satisfaction. The sentiment of delivering quality is shared by all our associates and is also why we are able to carry our long term strategies and short term actions successfully. We provide timely service, maintain complete integrity while attending to customers and a relentless passion for excellence. We strive to satisfy the need of our customers by developing, manufacturing and supplying products in accordance with the international standards and customer specifications with given capabilities:

Material Identification & Characterization	Material Testing	Materials Formulations
Compounding	Colour Matching	Extrusion
Material Specification, Process Validation	Troubleshooting	On Time Delivery



We stand for...

- Quality
- Consistency
- Reliability