

RADHEY³

POLYMERS L.L.C.

Polymer Specialist

MODIFIERS _____

MASTER BATCHES _____

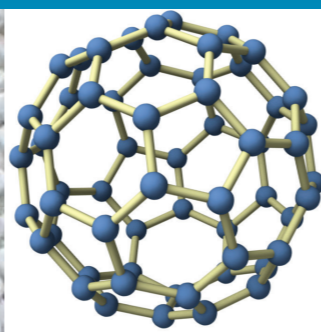
POLYMER COMPOUNDS _____

PVC STABILIZERS _____

RADHEY POLYMERS L.L.C.

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MARKETS COVERED :
U.A.E. / OMAN / BAHRAIN / QATAR / KUWAIT / KSA / AFRICA



COMPANY PROFILE

Radhey Polymers LLC is a company based in Dubai, U.A.E, comprises of highly experienced and dedicated professionals and caters to the needs of plastic and PVC processing industries. It provides polymer additives needs of the plastic industry under one roof.

We work closely with all kind of plastic manufacturers with an aim to provide quality products which would assist customers in improving the quality of their product and at the same time reduce the cost. All our products have very high level of consistency, are environment friendly and come in excellent packing to prevent any moisture gain or loss.

We have the track record of excellent customer service and meeting the dead line to deliver material as per the needs of the customers. With good after sales and technical service we create value addition for our customers which has been appreciated by many of our business partners.

Key product categories are listed below, details of which can be found in the enclosed sheets.

- **Modifiers** - Property improvement and cost reduction in plastic and PVC industry
- **Master Batches** - White, black, colour and various speciality master batches
- **Polymer Compounds** - Calcium and transparent fillers with various polymers base
- **PVC Stabilizers and additives** - Excellent heat stability with high lubrication

POLYCOM

POLYCOM - MODIFIER FOR VARIOUS PLASTIC INDUSTRIES APPLICATIONS

Polycom is an elastomer based compound which works as a modifier, processing aid and excellent bonding agent. It facilitates property enhancement and cost reduction. Polycom is compatible with most of the polymers like HM-HDPE, LDPE, LLDPE, PP, PS, PVC, etc.

Common benefits of using Polycom are:-

- Increases strength and elongation by providing improved homogeneity and dispersion
- Increases polymer stability in case of recycled polymer
- Enables to increase calcium carbonate/ recycled material
- Reduction of white master batch dosage
- Increase in output, smoothens manufacturing process and enables power saving
- Increases the life of screw and barrel



APPLICABLE INDUSTRIES

BLOWN FILM

Polymer replacement in HD, LD and LLDPE by 5-10% for both mono and multi layer. Excellent sealing properties with improved gloss



ROTO MOULDING

Polymer replacement by 5%-10%
Improves flexibility and enhances life of the product
Increases impact strength



WOVEN SACKS (RAFFIA) JUMBO BAGS / PP NON WOVEN

Polymer replacement in HD/ PP by 2-6%
Reduces water carry over
Reduces breakages in tape plant and looms
Reduces powder formation in looms
Denier and GSM variation is controlled



SHEET AND THERMOFORMING- PP/PS

Polymer replacement in PP/PS by 5%-10%
Improves flexibility and elasticity



HDPE / PPR PIPES

Polymer replacement by 5%-10%
Improves flexibility and impact strength
Increases welding properties



INJECTION / BLOWMOULDING

Control of thickness variation and shrinkage
Increasing impact strength and drop test properties
Dosage of 5% to 15% without changing usual formulation



POLYCOM P

POLYCOM P- MODIFIER FOR PVC PIPES, PROFILES AND FITTINGS

Polycom P works as a modifier, processing aid and excellent bonding agent which replaces impact modifier and processing aid.

Common advantages of using Polycom P are :-

- Replacement of processing aid and impact modifier resulting in good cost saving
- Better impact strength and tensile strength
- Thickness variation can be controlled
- Increase in output and smooth manufacturing process
- Eliminates agglomeration and reduces gelation time
- Excellent dispersion and improved glossiness
- Calcium carbonate dosage can be increased by 5- 10PHR



APPLICABLE INDUSTRIES

PVC PIPES -

Conduit, drainage and pressure pipes



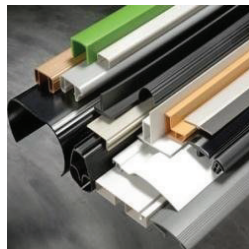
PVC Fittings -

Conduit, drainage and pressure fittings



PVC Profiles -

Duct, panels and electrical profiles



SPVC -

Garden hose, braided hose and suction hose



MICRO PVC COLOUR MASTER BATCHES

Generally powdered pigments have aggregates and agglomerates which creates poor dispersion due to undispersed particles in thin PVC applications

Micro PVC master batches, the pigment is dispersed to the finest possible particle size by using speciality dispersant and additives under strict process conditions. This micro PVC master batches gives excellent dispersion in final application

Micro PVC MB available in **White, Black, Grey, Yellow, Red, Green, Blue, Orange and Terracotta**

Appearance : Dust free micro granules

Carrier Resin : PVC compatible

Benefits : Consistent colour strength. Excellent & Uniform dispersion. Economy in use

Dodage : 0.1 to 2.0% depending on final shade required

Applications : All rigid & Flexible PVC applications Pipes, Fittings, Sheets, Profiles, Wires and Cables etc..



MASTER BATCHES

WHITE, BLACK AND COLOUR MASTER BATCHES

Various types of competitive white, black and colour master batches with different concentrations of pigments to provide effective dispersion in different polymer matrix (PE, PP, PS and PET) to give high opacity results with minimum dosage.

White MB- Titanium Di Oxide concentration from 30% up to 70%

Black MB- Carbon black concentration from 30% to 50%.

Colour MB- Pigment concentration from 20% to 40%, based on customer requirement. Most of the common colour shades are readily available while specific shades can be developed.

Special Effect MB- We can offer fluoresent, pearlescent, metallic effect and special ceramic effect MB.

Available in all career resins.

Catering to the needs of industries like blown film, injection and blow moulding, raffia, non-woven, sheet extrusion and thermoforming.

Dosage ranging from 2% to 5%.



SPECIALITY MASTER BATCHES / POLYMER ADDITIVES

Our wide range of additives MB ensures ease in processing, enhancing product functionality and end product safety standards.

- ANTIBLOCK MB
- ANTI STATIC MB
- SLIP ADDITIVE MB
- OPTICAL BRIGHTNER MB
- NUCLEATING AGENT MB
- ANTI OXIDENT MB
- POLYMER PROCESSING AID
- UV STABILIZER
- DESICCANT MB
- FLAME RETARDENT MB
- ANTI BACTERIAL
- PURGING COMPOUND
- AND MANY MORE.....



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POLYMER COMPOUNDS

CALCIUM CARBONATE COMPOUNDS (FILLERS)

High quality and ultra fine particles of calcium carbonate used in compounding which facilitates in polymer replacement, cost reduction and at the same provides better quality to finished product as per standards. It provides good dispersion and heat stability. Various grades with different polymer base are available to suit different applications. Most of these products are suitable for food contact application on the Commission Regulation (EU) No.10/2011.



CATEGORIES	APPLICATIONS
PE Carrier	Blown Film, Raffia, Blown moulding and Injection moulding and thermoforming. Dosage starting from 10% to 50%, with various intensity of whiteness
PP Carrier	Highly suitable for PP Raffia, Injection and blow moulding and thermoforming. Also available grade specifically for non-woven application. Dosage from 10% to 25%.
PS Carrier	PS Thermoforming. Dosage from 5% to 15%

TRANSPARENT TALC FILLER

High quality of pure talc powder used in compounding which provides very good mechanical properties with high transparency. It improves tensile strength, translucent, anti blocking effect and crackling sound with cost reduction.



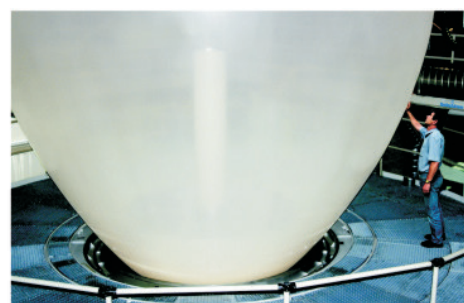
APPLICABLE INDUSTRIES

Blow Film: Dosage 10% to 20%

Construction film: Dosage 15% to 30%

Raffia: Dosage 10% to 20%

Blow and Injection Moulding: Dosage 5% to 15%



PVC STABILIZERS

Stabilizers are essential for PVC processing and provide the finished product with the required properties and durability. We have wide range of PVC stabilizers (lead/calcium zinc/ tin base) single stabilizers and one packs. Our product have wide range of usage in application such as rigid window profiles, PVC pipes, Injection moulding, cable insulation, flexible hoses and sheets, etc. High standard of the stabilizers results in lower dosage and in effect cost savings. The table below shows various products, related application along with the key features and benefits associated.



Application	Type	Features	Dosage
PIPES 	Pb	Superior heat resistance and surface luster with high lubrication.	2.4- 3.0 PHR
	Ca-Zn	Non toxic stabilizer (lead free)	2.0 – 4.0 PHR
FITTINGS 	Pb	Superior heat resistance and surface luster with high lubrication	3.0 – 5.0 PHR
	Ca-Zn	Non toxic stabilizer (lead free) Good Heat Stability with lubricity	4.0 – 5.0 PHR
	Methyl Tin	Excellent Heat resistance with lower dosage	1.2 – 2.0 PHR
PROFILES 	Pb	High heat resistance with lubrication	2.0-3.0 PHR
	Ca-Zn	Non toxic stabilizers. Good Heat Stability, weatherability and lubricity	3.0-5.0 PHR
HOSES 	Pb Ca-Zn Ba-Zn	Designed for softening and hardening along with superior heat stability	2.0-3.0PHR
CABLE & WIRES 	Ca-Zn	Non toxic stabilizers. Good Heat Stability, weatherability and lubricity	70'C: 3.0 –5.0PHR 90 C: 7.0 – 9.0PHR 105 C: 10.0 – 12.0PHR 125 C: 13.0 – 15.0PHR
General Film & Sheets 	Ca/Ba/Zn	Good Heat Stability, weatherability and lubricity	1.5–3.0 PHR

SINGLE STABILIZERS

TBLS, DBLS, DBLP, Lead Stearate, Calcium Stearate, Zinc Stearate

ADDITIVES AND PIGMENTS

Pigments : Titanium Di Oxide, Carbon Black, Blue, Red, Green and orange

Lubricants : PE wax, Steric Acid

Plasticizers : DOP, CPW and ESBO

Modifiers : Impact modifiers and Processing Aid

