

INDUSTRIAL GENERAL CATALOG





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ZARIFMOSAVAR
INDUSTRIAL





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Let's use
water based
products to save our planet

www.resinpolymer.com



ABOUT US

Resinpolymer is one of ZarifMosavar subsidiaries with more than two decades of experience in oil and resin manufacturing.

Our technical experts design specific water based emulsions for a wide range of applications.

Our products include vinyl acetate homopolymers, styrene-acrylic copolymers, vinyl-acrylic copolymers, pure acrylic copolymers, XSBR latex, spin finish oils & textile softeners.



ISOTS/16949:2009



ISO10002



ISO9001:2008



PVAC

HOMOPOLYMER

Poly vinyl acetate (PVAc, poly(ethenyl ethanoate): commonly referred to as wood glue, white glue, carpenter's glue, school glue, or PVA glue) is an aliphatic rubbery synthetic polymer with the formula $(C_4H_6O_2)_n$. It belongs to the polyvinyl esters family with the general formula $-[RCOOCHCH_2]-$. It is a type of thermoplastics.

As an emulsion in water, PVAc emulsions are applied as a good adhesive for porous materials, particularly for wood, paper and cloth. The stiff homopolymer PVAc, would be used as base resin in paint and other coatings, as binder in nonwovens, glass fibers, filter papers and textile finishing.

Applications:

- Wood glue (PVAc is known as "white glue" and the yellow as "carpenter's glue".)
- Lower drape sizing
- Paper adhesive during paper packaging conversion
- Wall to wall carpet sizing
- Adhesive in bookbinding and book arts, due to its flexible strong bond and non-acidic nature. (unlike many other polymers)
- Wallpaper adhesive
- Sizing in shoe insole board manufacturing
- Primer for drywall and other substrates



PAVc
 Wood
 Glue
 White
 Glue
 Carpenter's
 Glue
 School
 Glue

An Artificial
 Rubber
 Polymer

Code	Appearance	Solid Content (%)	Viscosity (Poise) @20 °C	PH	MFFT	Container: Barrel (200Kg)	Chemical Composition
RP 401	White Paste	1 ± 40	1000 - 800	7 - 5	15	*	PVAc Homopolymer
RP 501 L	White Emulsion	1 ± 50	10 - 1	5 - 4	15	*	PVAc Homopolymer
RP 501	White Paste	1 ± 50	1000 - 700	5 - 4	15	*	PVAc Homopolymer
RP 502	White Paste	1 ± 50	1000 - 700	5 - 4	0 <	*	PVAc Homopolymer
RP 503	White Emulsion	1 ± 50	100 - 20	5 - 4	0 <	*	PVAc Homopolymer

COPOLYMER

Acrylate Copolymer is a general term for copolymers of two or more monomers consisting of acrylic acid, methacrylic acid or one of their simple esters. Acrylic copolymer emulsion can be used for formulating premium quality decorative paints for interior application. It imparts excellent gloss, flow and leveling properties besides other improved properties such as excellent colour retention, alkali & UV resistance .

Styrene acrylic copolymer emulsion is a water based dispersion emulsion of styrene acrylic copolymer. Styrene acrylic copolymer family have mixed benefits of styrenics with the optical quality of acrylates.

These kinds of copolymer 's can be used as:

- Concrete & tile adhesive
- Cellophane glue
- White roof coating
- Acrylic paint
- Paper sizing

Vinyl acrylic copolymer emulsion is a stabilized colloid water based copolymer emulsion of vinyl acetate-acrylic copolymer. This product would deliver , great holding power, and high inter molecular strength.

It would be used in manufacturing exterior and interior semi gloss/flat paints.



Code	Appearance	Solid Content (%)	Viscosity [Poise] @20 °C	PH	MFFT	Container: Barrel (200Kg)	Chemical Composition
RP 5030	White Emulsion	1 ± 50	50 - 20	5 - 4	8	*	Vinyl Acrylic Made by 3 Monomers
RP 5020	White Emulsion	1 ± 50	40 - 20	5 - 4	0	*	Vinyl Acrylic Made by 2 Monomers
RP 5033	Bluish White Emulsion	1 ± 50	80 - 30	9 - 7	13 <	*	Styrene Acrylic
RP 5023	Bluish White Emulsion	1 ± 50	80 - 30	9 - 7	0	*	Styrene Acrylic
RP T30	Bluish White Emulsion	1 ± 29	2 - 1	3 - 2	-	*	Pure Acrylic
RP V40	Bluish White Emulsion	1 ± 39	3 - 1	6.5 - 5.5	0 <	*	Vinyl Acrylic Self-Crosslinking

These kinds of copolymer 's can be used as:

- Semi-plastic and plastic paint
- Soft texture sizing
- Carpet back coating



PURE ACRYLIC

Pure acrylic resins are a group of related thermoplastic or thermosetting plastic substances derived from acrylic acid, methacrylic acid or other acrylic monomers. Pure acrylic resin used in an emulsified form for manufacturing lacquer, textile finishes, adhesives etc,.

These kinds of product 's can be used as:

- Lable and tape (BOPP) adhesive
- Ineffective adhesive
- Cellophane glue
- Acrylic paint
- Soft and hard texture sizing
- Curtain sizing

Lable adhesive tape adhesive

A Group of related thermoplastuc or thermosetting plastic substances



Code	Appearance	Solid Content (%)	Viscosity (Poise) @20 °C	PH	MFFT	Container: Barrel (200Kg)	Chemical Composition
RP 55	White Emulsion	1 ± 55	8 - 3	6 - 4	-	*	Pure Acrylic
RP 55N	White Emulsion	1 ± 55	7.5 - 3.5	8 - 6	-	*	Pure Acrylic
RP F01	White Emulsion	1 ± 50	15 - 5	3 - 2	-	*	Pure Acrylic
RP H60	White Emulsion	1 ± 55	3 - 2	3 - 2	-	*	Pure Acrylic
RP 4501	Bluish White Emulsion	1 ± 45	8 - 2	4 - 2	35	*	Pure Acrylic Self-Crosslinking
RP 4502	Bluish White Emulsion	1 ± 45	8 - 2	4 - 2	2	*	Pure Acrylic Self-Crosslinking
RP C450	Bluish White Emulsion	1 ± 45	3.5 - 1.5	8 - 6	0 <	*	Pure Acrylic



XSBR

LATEX

RPX and RPN are aqueous dispersion of carboxylated styrene-butadiene copolymer. Styrene-butadiene carboxylated latex are among the most worldwide used elastomers, employed in a large variety of applications which significantly contribute to our standards of living.

RPX is used as a stiffener for conventional coating and designed for non-woven fabric impregnation and coating such as automotive products, needle punch carpets. This kind of latex has good adhesion to most surfaces, high degree of stiffness, excellent water resistance and high durability.

Code	Appearance	Solid Content (%)	Viscosity (Poise) @20 °C	PH	Density @ 20 °C (gr / cm ³)	Container	Chemical Composition
RPX 25	White Emulsion	1 ± 50	3 - 2	8 - 7	1.01	Barrel / IBC	Carboxylated Styrene Butadiene Rubber Emulsion
RPX 48		1 ± 50	3 - 1	8 - 7	1.01	Barrel / IBC	
RPX 55		1 ± 50	3 - 1	8 - 7	1.01	Barrel / IBC	
RPX 10		1 ± 50	5 - 2	9 - 8	1.01	Barrel / IBC	
RPX 15		1 ± 50	6 - 2	8 - 7	1.01	Barrel / IBC	



PPX
 Is an aqueous
 dispersion of a
 carboxylated
 styrene
 butadiene
 copolymer

Code	Appearance	Solid Content (%)	Viscosity (Poise) @20 °C	PH	Density @ 20 °C (gr / cm ³)	Container	Chemical Composition
RPN 15	White Emulsion	1 ± 50	4 - 2	8 - 7	1.01	Barrel / IBC	Carboxylated Styrene Butadiene Rubber Emulsion
RPN 25		1 ± 50	4 - 2	8 - 7	1.01	Barrel / IBC	
RPN 5		1 ± 50	5 - 1	9 - 8	1.01	Barrel / IBC	

SPIN FINISH OIL

Spin finishes are some kinds of the lubricants which provide surface lubricating, plasticizing and static protection to man-made fibers. They are applied in fluid condition just before winding up.

Applications of spin finishes:

- To lubricate yarn.
- To reduce static electricity.
- To increase cohesion of the yarn.

Code	Appearance	Density @ (gr / cm ³)	PH (%5 Solution)	Active Substance (%)	Chemical Composition	Dilution	Solubility in Water	Application
SFP01	Clear Liquid	1.06	7	%80	Non-Ionic Emulsion	-	Soluble	Spin Finish Oil for POY Fiber
SFS202	Yellowish	-	7	%8	Cationic Solid Wax	%14 in 70 °C Water		Spin Finish Oil for Recycled Softening PET Fiber
SFB4521	Clear Liquid	1.01	7	%70 - 60	Non-Ionic Emulsion	%100 in Water		Spin Finish Oil for PEt, PP, PA* Fiber



Different types of spin finishes:

- Lubricants: Used to control the friction of the fiber. For instance: Oils, poly glycols.
- Plasticizers: applied to make the fiber more flexible by reducing the Tg value and also reduce the brittleness. For Example: silicate, dibutyl.
- Anti static agent: Used to reduce the static charge of fiber. Example: Lithium chloride, Butyl stearate.

Properties of spin finishes:

- Providing cohesion of the filament
- No oxidation in the air
- Having good wetting properties
- Not encouraging bacterial growth
- Not being carcinogenic
- Having anti static properties

Code	Appearance	Density @ (gr / cm ³)	PH (%5 Solution)	Active Substance (%)	Chemical Composition	Dilution	Solubility in Water	Application
SF3221	Reddish liquid	1.01	7	%70	Non-Ionic Emulsion	%10 in Water	Soluble	Carding and Spin Finish Oil for PET and PP Fiber
SD3121	Reddish liquid	1.01	7	%70		%10 in Water		
SF4221	Yellowish Lucid Liquid	1.01	7	%60 - 50		%10 in Water		
SD4321	Yellowish Lucid Liquid	1.01	7	%70 - 60		%10 in Water		
SD4121	Yellowish Lucid Liquid	1.01	7	%60 - 50		%10 in Water		
SFA1050	Clear Liquid	1.01	7	%60 - 50		%10 in Water		Anti Static Oil for PET & PP Fiber

USAGE DIVERSIFICATION TABLE

Code	Adhesive										Paint & Coating					Sizing							
	Carton Packaging	Wood Adhesive	Tile Adhesive	Concrete Adhesive	Label Adhesive	Tape Adhesive (BOPP)	Ineffective Adhesive	Cellophane Glue	Laminate Adhesive	White Roof Coating	Kinitex	Acrylic Paint	Plastic Paint	Semi-Plastic Paint	Thickener	Printing Binder	Carpet Back Coating	Woven Sizing	Texture Hard Sizing	Texture Soft Sizing	Filter	Curtain	Paper
Homopolymer Resin	RP 401	*														*	*	*		*			
	RP 501 L	*														*	*	*		*	*		
	RP 501	*	*													*	*	*		*	*		
	RP 502	*							*			*	*				*		*	*			
	RP 503	*							*								*		*	*			
Copolymer Resin	RP 5030		*					*		*			*								*		
	RP 5020	*						*					*			*							
	RP 5033			*							*												*
	RP 5023				*			*		*	*												
	RPT 30													*									
	RPV40							*							*				*				



Code	Adhesive							Paint & Coating						Sizing										
	Carton Packaging	Wood Adhesive	Tile Adhesive	Concrete Adhesive	Lable Adhesive	Tape Adhesive (BOPP)	Ineffective Adhesive	Cellophane Glue	Laminate Adhesive	White Roof Coating	Kinitex	Acrylic Paint	Plastic Paint	Semi-Plastic Paint	Thickener	Printing Binder	Carpet Back Coating	Woven Sizing	Texture Hard Sizing	Texture Soft Sizing	Filter	Curtain	Paper	
Pure Acrylic Resin	RP 55				*	*																		
	RP 55N				*	*																		
	RPF 01						*																	
	RPH 60						*	*																
	RP 4501																		*				*	
	RP 4502											*								*				
	RPC 450								*															
XSBR Resin	RPX 25																		*					
	RPX 48																		*					
	RPX 55																		*					
	RPN 15											*	*							*				*
	RPN 25																			*				
	RPX 10											*	*						*					*
	RPX 15											*	*											
	RPN 5				*															*			*	

SPECIFICATION

COMPREHENSIVE TABLE

Code	Homopolymer Resin					Copolymer Resin						
	RP 401	RP 501 L	RP 501	RP 502	RP 503	RP 5030	RP 5020	RP 5033	RP 5023	RPT 30	RPV 40	
Specification	Appearance	White Paste	White Emulsion	White Paste	White Paste	White Emulsion	White Emulsion	White Emulsion	Bluish White Emulsion	Bluish White Emulsion	Bluish White Emulsion	Bluish White Emulsion
	Tg (°C)	25	25	25	0	0	14	5	13	0>	-	0
	Solid Content (%)	1 ± 40	1 ± 50	1 ± 50	1 ± 50	1 ± 50	1 ± 50	1 ± 50	1 ± 50	1 ± 50	1 ± 29	1 ± 39
	Viscosity (Poise) @20 °C	800 to 1000	1 to 10	700 to 1000	700 to 1000	20 to 100	20 to 50	20 to 40	30 to 80	30 to 80	1 to 2	1 to 3
	PH	75-	54-	54-	54-	54-	54-	54-	97-	97-	32-	65-
	MFFT	15	15	15	0 <	0 <	8	0	<13	0	-	0>
	Container: Barrel (200Kg)	*	*	*	*	*	*	*	*	*	*	*
	Chemical Composition	PVAc Homopolymer					Vinyl Acrylic by 3 Monomers	Vinyl Acrylic by 2 Monomers	Styrene Acrylic	Styrene Acrylic	Pure Acrylic	Vinyl Acrylic



SPECIFICATION

COMPREHENSIVE TABLE

Pure Acrylic Resin							Pure Acrylic Resin							
RP 55	RP 55N	RPF 01	RPH 60	RP 4501	RP 4502	RPC 450	RPX 25	RPX 48	RPX 55	RPX 10	RPX 15	RPN 25	RPN 15	RPN 5
White Emulsion	White Emulsion	White Emulsion	White Emulsion	Bluish White Emulsion	Bluish White Emulsion	Bluish White Emulsion	White Emulsion	White Emulsion	White Emulsion	White Emulsion	White Emulsion	White Emulsion	White Emulsion	White Emulsion
32-	40-	30-	40-	38	5	0	25	48	55	10	15	25-	15-	5-
1 ±55	1 ±55	1 ±50	1 ±55	1 ±45	1 ±45	1 ±45	1 ±50	1 ±50	1 ±50	1 ±50	1 ±50	1 ±50	1 ±50	1 ±50
3 to 8	3.5 to 7.5	5 to 15	2 to 3	2 to 8	2 to 8	1.5 to 3.5	2 to 3	1 to 3	1 to 3	2 to 5	2 to 6	2 to 4	2 to 4	1 to 5
54-	86-	32-	32-	42-	42-	86-	87-	87-	87-	98-	87-	87-	87-	98-
-	-	-	-	35	2	0>	-	-	-	-	-	-	-	-
*	*	*	*	*	*	*	*/IBC	*/IBC	*/IBC	*/IBC	*/IBC	*/IBC	*/IBC	*/IBC
Pure Acrylic							Carboxylated Styrene Butadiene Rubber Emulsion							



BCF YARN
Melt Spinning

“POLYESTER,
POLYPROPYLENE,
POLYAMID”

www.zarifmosavar.com



ABOUT US

Zarif-Mosavar industrial group initiated its activities in boroujen industrial zone in 1984 The group central office is located in Isfahan staple fiber and yarn production units were also established together along with other production units in the same year.

Zarif-Mosavar final product quality indicates high quality range of applied raw material in the process of our internal production. due to continuity of successful activities of the complex and, because of popularity and credibility of brand, various certificates & awards were obtained from national and international institutes. These certificates would easily prove this point that the quality category has the highest priority for Zarif-Mosavar group in all the required levels.

Various modern production lines, advanced QC laboratories along with specialized expert personnel have come together for Zarif-Mosavar group to manufacture and provide best products from best raw materials production lines and laboratory equipment.

Zarif-Mosavar co, manufacture its products by applying latest technology and modern production facilities which are enlisted as bellows.



PRODUCTION LINES

Zarif Mosavar Co. produces its products by using the latest technologies and modern production equipment. Production equipments are listed below:

- Five production lines for different polyester fibers, recycled polyester, polyamide, and polypropylene with the daily capacity of 100 tons, and a line for washing crushed polyester material.
 - Three production lines for BCF Yarn, heat set, frieze and cabling yarn with the daily capacity of 20 tons.
 - Production line of packing plastic materials with the daily capacity of 3 tons .
 - Production line of NGR recycles granules with the capacity of 6 tons per day.
 - Equipped QC laboratory with all the required equipment for yarn and fiber production processes
- It is to note that all the existing production and laboratory equipment are made in well-known European companies from France, England, to Italy.

LATEST
TECHNOLOGY
MODERN
EQUIPMENT





PRODUCTS

FIBERS & YARNS BCF

In the field of Melt spinning, Zarif Mosavar products are divided into two main groups of fibers & BCF Yarns.

Man - made fibres made of:

polyester (virgin and recycled), poly propylene, and polyamide beside BCF polypropylene and polyamide yarn, (heat set, frieze, md cabling).

Product Group	Material	Type 1	Type 2	Measuring Unit	Reworks	Color
Fiber	Polyester	Virgin	Solid	>3	To Order	To Order
Fiber	PET	Recycle	Solid	>3	To Order	To Order
Fiber	Polyester	Virgin	Hallow	>2	To Order	To Order
Fiber	PET	Recycle	Hallow	>3	To Order	To Order
Fiber	Polypropylene	Virgin	Solid	>2	To Order	To Order
Fiber	Polypropylene	Virgin	Concrete	>2	To Order	To Order
Fiber	PET	Recycle	Concrete	>2	To Order	To Order
Fiber	Polyamide	Virgin	Solid	>2	To Order	To Order
Fiber	Polypropylene	Virgin	Hydrophilic	>2	To Order	To Order
Fiber	Polyester	Virgin . Recycle	Solid	>3	To Order	To Order
Fiber	PET	Recycle	Melange	>3	To Order	To Order
Fiber	Polypropylene	Virgin	High Tenacity	>3	To Order	To Order
Thread	Polypropylene	Heat Set	Frieze	>1400	Two Folded	To Order
Thread	Polypropylene	Heat Set	Frieze	>2800	Single Folded	To Order
Thread	Polyamide	Heat Set	Frieze	>800	Single Folded	To Order
Thread	Polyester	Heat Set	Frieze	>800	Single Folded	To Order
Thread	Polyester	Heat Set	Frieze	>1600	Two Folded	To Order
Granule	Polyester	Pure	Recycle	PSU	MFI from 5 to 25	To Order
Granule	Polypropylene . Polyester	Mixed	Recycle	PPMA	MFI from 5 to 25	To Order
Granule	Polypropylene	Mixed	Recycle	PPU	MFI from 5 to 25	To Order
Plastic	Polypropylene	-	Virgin	* Single & Double Folded	Thickness 50-200	Transparent

* Width 35-175



COMPETITIVE

ADVANTAGES

Zarif-Mosavar group is supported by the ownership of Regal Petrochemical and Tis-Masterbatch companies and obviously there is no specific limitation in providing of row material.

MATERIALS
PRIMARY
HIGH
QUALITY
PRODUCTS





TECHNICAL SPECIFICATIONS

Technical specifications of some of the organization products are as follows:

Denier 3 Polyester Fibers				
Product Specification	Acceptable Range	Measuring Unit	Grade	Test Reference
Length of Fibers	51 ± 5 . 64 ± 5	mm	A	ISO6989
Extraction Oil	0.2 ± 0.05	%	B	ISIRI-30
Strength	Min: 3	Gram Force / Denier	B	ISO5079
Elongation of Length	50 ± 10	%	B	ISO5079
Elegance	3 ±10%	Denier	A	ISO1973
Humidity	Max: 1	%	A	ISIRI-30
Contraction	-2 - 0	%	B	ASTM D4974
Color	According to Specimen	-	B	Control Sample
No . of Curls	50 ± 10	No. / Decimeter	B	Domestic Method

MELT SPINNING CO.

Denier 6 Polyester Fibers				
Product Specification	Acceptable Range	Measuring Unit	Grade	Test Reference
Length of Fibers	64 ± 5	mm	B	ISO6989
Extraction Oil	0.15 - 0.25	%	B	ISIRI-30
Strength	Min: 3	Gram Force / Denier	B	ISO5079
Elongation of Length	55 ± 15	%	B	ISO5079
Elegance	6 ± 10%	Denier	A	ISO1973
Humidity	Max: 1	%	A	ISIRI-30
Contraction	-2 - 1	%	B	ASTM D4974
Color	According to Specimen	-	B	Control Sample
No. of Curls	45 ± 10	No. / Decimeter	B	Domestic Method

Denier 6 Polypropylene Fibers (For Export)				
Product Specification	Acceptable Range	Measuring Unit	Grade	Test Reference
Length of Fibers	90 ± 5 . 110 ± 5	mm	A	ISO6989
Extraction Oil	0.4 ± 0.05	%	A	ISIRI-30
Elegance	6 ± %10	Denire	A	ISO1973
Tearing Strength	Min: 45	Centinewton / Tex	A	ASTM D3822
Elongation of Length	Min: 40	%	B	ASTM D3822
Humidity	Max: 1	%	A	ISIRI-30
Contraction	Max: 3	%	C	ASTM D4974
Color	According to Control Sample	-	B	Control Sample

MELT SPINNING CO.

Denier 15 Polyester Fibers				
Product Specification	Acceptable Range	Measuring Unit	Grade	Test Reference
Length of Fibers	6 ± 5	mm	A	ISO6989
Extraction Oil	0.2 - 0.4	%	B	ISIRI-30
Strength	Min: 3	Gram Force / Denier	B	ISO5079
Elongation of Length	Min: 60	%	B	ISO5079
Elegance	15 ± 10%	Denier	A	ISO1973
Humidity	Max: 1	%	B	ISIRI-30
Contraction	Max: 1	%	B	ASTM D4974
Color	Fully Dispersed in Water	-	B	Control Sample
No. of Curls	26 ± 6	No. / Decimeter	A	Domestic Method
Denier 17 Polyester Fibers				
Product Specification	Acceptable Range	Measuring Unit	Grade	Test Reference
Length of Fibers	64 ± 5	mm	B	ISO6989
Extraction Oil	0.2 - 0.4	%	C	ISIRI-30
Elegance	17 ± 10%	Denier	B	ISO5079
Strength	Min: 3	Gram Force / Denier	B	ISO5079
Elongation of Length	Min: 100	%	B	ISO1973
Humidity	Max: 1	%	C	ISIRI-30
Contraction	Max: 5	%	B	ASTM D4974
Color	According to Specimen	-	B	Control Sample
No. of Curls	25 - 30	No. / Decimeter	B	Domestic Method



Self - Colored 35T Diameter ConcreteFibers				
Product Specification	Acceptable Range	Measuring Unit	Grade	Test Reference
Length of Fibers	6 ± 1.5 . 12 ± 1.5 . 18 ± 1.5	mm	B	ISO6989
Extraction Oil	0.5 - 0.6	%	A	PL-OPA0
Diameter	35 ± 1.7	Micron	B	Domestic Laboratory
Tearing Strength	Min: 345	Centinewton / mm2	B	ASTM D3822
Elongation of Length	Max: 80	%	C	ASTM D3822
Humidity	Max: 1	%	B	PL-MERO
External Particles	Without External Particles	-	A	Control Sample
Dispersion	Fully Dispersed in Water	-	A	Domestic Method
Self - Colored 35T Diameter ConcreteFibers				
Product Specification	Acceptable Range	Measuring Unit	Grade	Test Reference
Length of Fibers	6 ± 1.5 . 12 ± 1.5 . 18 ± 1.5	mm	B	ISO6989
Extraction Oil	0.5 - 0.6	%	A	PL-OPA0
Diameter	35 ± 1.7	Micron	B	Domestic Laboratory
Tearing Strength	Min: 345	Centinewton / mm2	B	ASTM D3822
Elongation of Length	Max: 80	%	C	ASTM D3822
Humidity	Max: 1	%	B	PL-MERO
External Particles	Without External Particles	-	A	Control Sample
Dispersion	Fully Dispersed in Water	-	A	Domestic Method

“THE
VARIETY OF
NATURE'S
COLOURS”
Textile Industry

“TIS
MASTERBATCH”
Textile & Plastic Industry

www.tismasterbatch.com



ABOUT US

TIS Company (TISCO), as one of the subsidiaries of Zarif Mosavar Industrial Group, is a high technology enterprise specialized in researching, developing, processing and producing different kinds of Masterbatches, particularly ones being used in fiber and textile industries. TISCO was established in 1999 and its preliminary purpose was to produce the needed Masterbatch for the fiber production lines of Zarif Mosavar Industrial Group.

Today, TISCO gladly satisfies its domestic and international customers by offering solutions for technical issues and providing them with standard and tailor-made colors. Our experience gained over the years enables us to produce high quality Masterbatch with different polymer bases including Polyethylene (PE), Polypropylene (PP), Polyester (PET), and Polyamide (PA) with various applications such as fibers, woven & non-woven bags, polymer pipes, film, sheets, injection and many more.



PRODUCTS

INFO

TISCO has classified its products into 4 categories as follows:

- Colour Masterbatch
- Black Masterbatch
- White Masterbatch
- Additive Masterbatch



TEXTILE
& PLASTIC
INDUSTRY

TIS MASTERBATCH CO.



COLOUR MASTERBATCH

TIS Company (TISCO) matched ten thousands of colours virtually in different polymers on the market. We have established a long-lasting leading position in the supplier market of colour concentrates. An interesting range of domestic and international customers appreciates our knowledge and experience in colour development.

Thanks to our state-of-the-art facilities in colour matching and fully equipped fiber labs, we can match exactly to colour your need. Our technology centres are equipped with research and quality control labs to ensure high quality products. The processing is done on a single & twin screw extruder machinery (made by well-known European manufacturers) leading to high quality products.

Our colorful Masterbatch has high concentration pigment with bright colors, excellent dispersion, good heat re-sistance and heat stability performance, easy Coloring, environment protection, and convenient operation. All these together enable us to produce quality Masterbatch being used in fiber, PP woven & non-woven bags, Injection Moulding, Blow Moulding, Extrusion Moulding, Blown Film, and others.

Colorful Masterbatch

Code	Colour	Polymer Based	Heat Stability	Application	Melting Point	Dispersion	Density gr/cm ³	Carrier MFI
26004	Orange	PE	280 °c	PP Fiber, Blown Film	131±1 °c	1	1.33±0.05	18 gr/10min(2.16kg,190 °c)
26010	Pink	PE	280 °c	PP Fiber, Blown Film	131±1 °c	0 - 1	1.2±0.05	18 gr/10min(2.16kg,190 °c)
27000	Red	PE	240 °c	Extrusion, PP Woven Bag, Blown Film	131±1 °c	1 - 2	1.17±0.05	18 gr/10min(2.16kg,190 °c)
27004	Red	PE	240 °c	Extrusion, PP Woven Bag, Blown Film	131±1 °c	1 -2	1.12±0.05	18 gr/10min(2.16kg,190 °c)
27008	Red	PE	240 °c	PP Fiber, Blown Film	126±1 °c	2	1.08±0.05	20 gr/10min(2.16kg,190 °c)
27012	Dark Red	PE	240 °c	PP Fiber, Blown Film	126±1 °c	2	1.09±0.05	20 gr/10min(2.16kg,190 °c)
27014	Purple	PE	240 °c	PP Fiber, Blown Film	126±1 °c	2	1.07±0.05	20 gr/10min(2.16kg,190 °c)
28000	Gray	PE	280 °c	PP Fiber, Blown Film	131±1 °c	1	1.3±0.05	18 gr/10min(2.16kg,190 °c)
28002	Gray	PE	280 °c	PP Fiber, Blown Film	131±1 °c	1 -2	1.19±0.05	18 gr/10min(2.16kg,190 °c)
41000	Cream	PP	280 °c	PP BCF Yarn	156±1 °c	0 - 1	1.3±0.05	25 gr/10min(2.16kg,230 °c)
41002	Cream	PP	280 °c	PP BCF Yarn	156±1 °c	0 - 1	1.29±0.05	25 gr/10min(2.16kg,230 °c)
21002	Beige	PE	280 °c	Extrusion, PP Woven Bag, Blown Film	131±1 °c	1	1.44±0.05	18 gr/10min(2.16kg,190 °c)
21004	Beige	PE	280 °c	Extrusion, PP Woven Bag, Blown Film	131±1 °c	1	1.44±0.05	18 gr/10min(2.16kg,190 °c)
22018	Chocolate	PE	280 °c	PP Fiber, Blown Film	131±1 °c	1	1.33±0.05	18 gr/10min(2.16kg,190 °c)
22020	Brown	PE	280 °c	PP Fiber, Blown Film	131±1 °c	1	1.3±0.05	18 gr/10min(2.16kg,190 °c)
22022	Light Brown	PE	280 °c	PP Fiber, Blown Film	131±1 °c	1	1.13±0.05	18 gr/10min(2.16kg,190 °c)

Colorful Masterbatch

Code	Colour	Polymer Based	Heat Stability	Application	Melting Point	Dispersion	Density gr/cm ³	Carrier MFI
23002	Blue	PE	280°c	Extrusion, PP Woven Bag, Blown Film	131±1°c	1 - 2	1.13±0.05	18 gr/10min(2.16kg,190°c)
23004	Blue	PE	280°c	Extrusion, Pipe	131±1°c	1 - 2	1.17±0.05	4 gr/10min(2.16kg,190°c)
23008	Dark Blue	PE	280°c	PP Fiber, Blown Film	126±1°c	2	1.1±0.05	20 gr/10min(2.16kg,190°c)
24000	Green	PE	280°c	Pipe, Extrusion, Blown Film	131±1°c	1	1.25±0.05	18 gr/10min(2.16kg,190°c)
24006	Green Jade	PE	280°c	PP Fiber, Blown Film	126±1°c	2	1.18±0.05	20 gr/10min(2.16kg,190°c)
25000	Bright Purple	PE	240°c	PP Fiber, Blown Film	131±1°c	2	1.22±0.05	18 gr/10min(2.16kg,190°c)
61018	Cream	PET	300°c	PET Fiber	252±1°c	0 - 1	1.62±0.05	-
62006	Chocolate	PET	300°c	PET Fiber	252±1°c	0 - 1	1.62±0.05	-
62018	Walnut	PET	300°c	PET Fiber	252±1°c	1	1.62±0.05	-
62024	Dark Walnut	PET	300°c	PET Fiber	252±1°c	1	1.62±0.05	-
63004	Dark Blue	PET	300°c	PET Fiber	252±1°c	2	1.39±0.05	-
64006	Green	PET	300°c	PET Fiber, POY & FDY Yarn	252±1°c	1 -2	1.48±0.05	-
65000	Bright Purple	PET	270°c	PET Fiber	252±1°c	1 -2	1.4±0.05	-
66014	Pink	PET	270°c	PET Fiber	252±1°c	1 -2	1.49±0.05	-
67014	Red	PET	280°c	PET Fiber	252±1°c	2	1.35±0.05	-
67016	Red	PET	270°c	PET Fiber	252±1°c	2	1.38±0.05	-



Colorful Masterbatch								
Code	Colour	Polymer Based	Heat Stability	Application	Melting Point	Dispersion	Density gr/cm ³	Carrier MFI
68002	Gray	PET	300 °c	PET Fiber, POY & FDY Yarn	252±1 °c	0 - 1	1.43±0.05	-
48002	Silver	PE	280 °c	PP Fiber, Blown Film	156±1 °c	0 - 1	1.22±0.05	25 gr/10min(2.16kg,230 °c)
42000	Chocolate	PP	280 °c	PP BCF Yarn	156±1 °c	0 - 1	1.3±0.05	25 gr/10min(2.16kg,230 °c)
42004	Brown	PP	260 °c	PP BCF Yarn	156±1 °c	1	1.19±0.05	25 gr/10min(2.16kg,230 °c)
42006	Chocolate	PP	260 °c	PP BCF Yarn	156±1 °c	0 - 1	1.19±0.05	25 gr/10min(2.16kg,230 °c)
43000	Dark Blue	PP	260 °c	PP BCF Yarn	156±1 °c	0 - 1	1.2±0.05	25 gr/10min(2.16kg,230 °c)
43002	Blue	PP	260 °c	PP BCF Yarn	156±1 °c	1	1.19±0.05	25 gr/10min(2.16kg,230 °c)
44000	Green	PP	260 °c	PP BCF Yarn	156±1 °c	0 - 1	1.18±0.05	25 gr/10min(2.16kg,230 °c)
45000	Purple	PP	250 °c	PP BCF Yarn	156±1 °c	1 - 2	1.13±0.05	25 gr/10min(2.16kg,230 °c)
45004	Bright Purple	PP	280 °c	PP BCF Yarn	156±1 °c	0 - 1	1.18±0.05	25 gr/10min(2.16kg,230 °c)
46000	Bright Brown	PP	260 °c	PP BCF Yarn	156±1 °c	1	1.17±0.05	25 gr/10min(2.16kg,230 °c)
46002	Pink	PP	260 °c	PP BCF Yarn	156±1 °c	1	1.17±0.05	25 gr/10min(2.16kg,230 °c)
47000	Red	PP	250 °c	PP BCF Yarn	156±1 °c	1	1.12±0.05	25 gr/10min(2.16kg,230 °c)
48000	Bright Gray	PP	280 °c	PP BCF Yarn	156±1 °c	0 - 1	1.2±0.05	25 gr/10min(2.16kg,230 °c)

TIS MASTERBATCH CO.



BLACK MASTERBATCH

TIS Company (TISCO) offers various grades of black Masterbatch in different polymer types and grades of Black Carbon based upon the customer requirements.

Our carbon black, (made by well-known manufacturers) consist of a wide range of pigment systems varying from large to small particle sizes. The jetness and tinting strength of this pigment is very high.

Our black Masterbatch would be applied in a wide variety of polymer bases such as polyolefins, polyester, polyamide, etc.

Our advanced equipment testing machines, quality Black Carbon, excellent dispersion, good heat resistance and heat stability performance as well as handpicked personnel and specialists guarantee the final quality of black Masterbatch is being used in Fiber & Yarn, Pipes, Bags, Extrusion, Injection, Blow Film, and others.

TEXTILE & PLASTIC INDUSTRY



Black Masterbatch

Code	Polymer Based	Heat Stability	Application	Melting Point	Average of Largest Agglomerates	Dispersion	Density gr/cm ³	Carrier MFI
10514	PE	280°C	Pipe, Bag, Injection, Blown Film, Extrusion	131±1°C	(20 -25)µm	1 -2	1.21±0.05	18 gr/10min(2.16kg,190°C)
20500	PE	280°C	PP Fiber, BCF Yarn	131±1°C	(10 -15)µm	0 -1	1±0.05	18 gr/10min(2.16kg,190°C)
30500	PP	260°C	PP Fiber, BCF Yarn	156±1°C	(15 -20)µm	1	1±0.05	25 gr/10min(2.16kg,230°C)
60500	PET	300°C	PET Fiber	252±1°C	(15 -20)µm	1	1.33±0.05	-
60506	PET	300°C	PET Fiber, POY & FDY Yarn	230±1°C	(10 -15)µm	0 -1	1.31±0.05	-
60508	PET	300°C	PET Fiber	230±1°C	(15 -20)µm	1	1.27±0.05	-
60512	PET/PBT	300°C	Deep blue tone black Maserbatch for fine denier POY& FDY	250±1°C	(10 -15)µm	0 -1	1.3±0.05	-
50510	PET/PBT	300°C	PET Fiber	250±1°C	(15 -20)µm	1	1.27±0.05	-

TIS MASTERBATCH CO.



WHITE MASTERBATCH

TIS Company (TISCO) offers a wide range of white Masterbatch with excellent dispersion of high quality micron rutile titanium dioxide (imported from well-known manufacturers), carriers and additives.

This Masterbatch provides whiteness, brightness and opacity to the final product.

Our white concentrates are available in a number of carrier resins such as polyolefins, polyester, polyamide, etc. They are designed to be used in woven & nonwoven bags, pipes, extrusion, injection, and blow molding applications. We are capable of producing based upon your requirements.

TEXTILE & PLASTIC INDUSTRY



White Masterbatch

Code	Polymer Based	Heat Stability	Application	Melting Point	Average of Largest Agglomerates	Dispersion	Density gr/cm ³	Carrier MFI
10002	PE	280 °c	Pipe, Extrusion Blown Film	131±1 °c	(10 -15)µm	0 -1	1.21±0.05	18 gr/10min(2.16kg,190 °c)
10004	PE	280 °c	Pipe, Extrusion Blown Film	131±1 °c	(10 -15)µm	0 -1	1.21±0.05	18 gr/10min(2.16kg,190 °c)
10006	PE	280 °c	Extrusion, PP Woven Bag,Injection, Blown Film	131±1 °c	(15 -20)µm	0 -1	1.62±0.05	18 gr/10min(2.16kg,190 °c)
10008	PE	280 °c	Extrusion, PP Woven Bag,Injection, Blown Film	131±1 °c	(15 -20)µm	0 -1	1.65±0.05	18 gr/10min(2.16kg,190 °c)
30000	PP	280 °c	Pipe, Bag, Injection, Blown Film, Extrusion	157±1 °c	(15 -20)µm	0 -1	1.58±0.05	25 gr/10min(2.16kg,230 °c)
30002	PP	280 °c	Pipe, Extrusion, Blown Film, Spunband	157±1 °c	(10 -15)µm	0 -1	1.22±0.05	25 gr/10min(2.16kg,230 °c)
50000	PET	300 °c	Fiber, POY & FDY, Yarn	252±1 °c	(10 -15)µm	0 -1	1.52±0.05	-

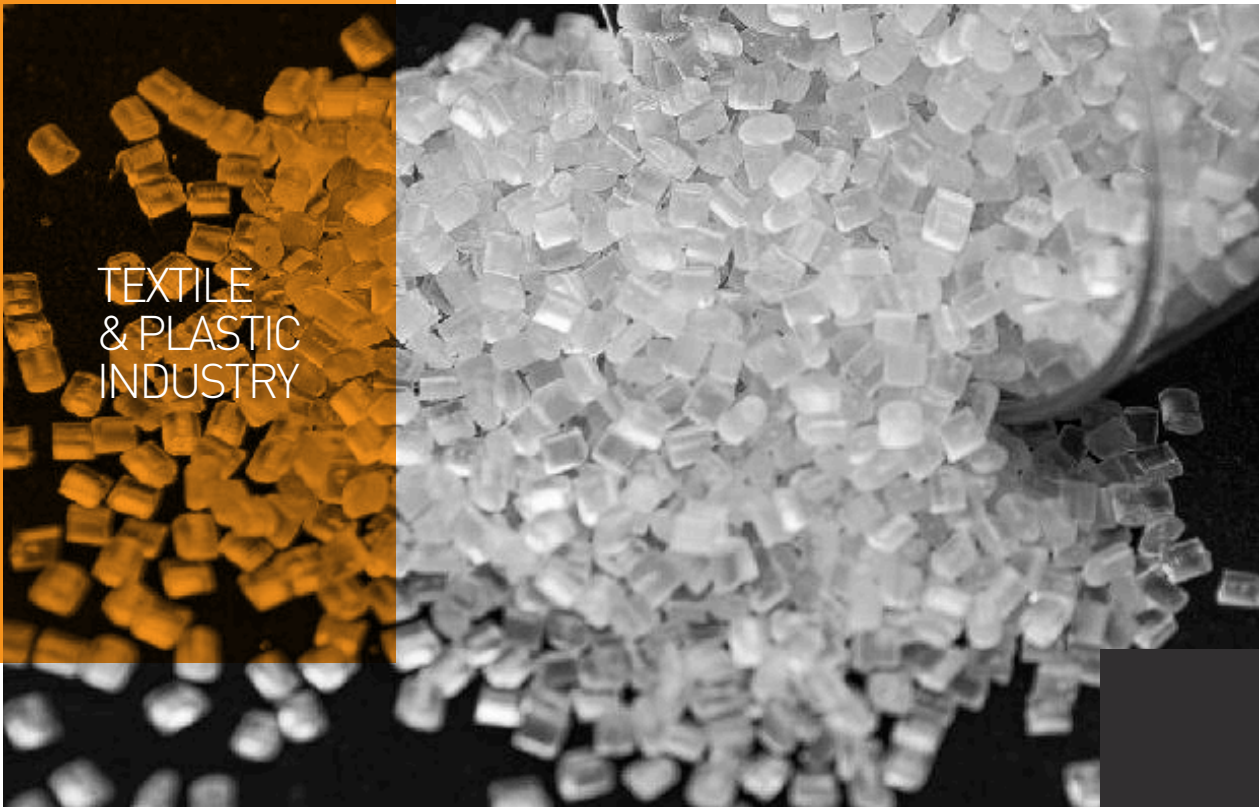


ADDITIVE MASTERBATCH

TIS Company (TISCO) manufactures a wide range of Masterbatch containing special additives to improve and modify the properties of polymers. Our additives are available in different polymer bases such as PE and PP.

TISCO has categorized its Additive Masterbatch into different types such as Antioxidants, UV Stabilizers and Polymer Process Aids (PPA).

- Antioxidants: The use of antioxidants in polymer processing can offer better stabilization of the polymer during processing and also prolong its useful life in the end application. So, this additive can give process stabilization in PP fiber production when careful control of the MFI is essential to ensure high quality trouble free production. We help you to select the correct package of antioxidants enhancing long term color and thermal stability.
- UV Stabilizers : Ultra Violet radiation is destructive to polymeric materials. So, the choice of an appropriate and efficient UV package is critical to ensure good performance and longevity of the polymer.
- Polymer Process Aids (PPA): PPA Masterbatch is specifically designed to enhance extrusion ability of plastics (PE Films, pipes, tubes...) leading to productivity and quality improvement.
- Etc.



Additive Masterbatch

Code	Polymer Based	Heat Stability	Application	Melting Point	Density gr/cm ³	Carrier MFI
29910	Polyethylene Based Antioxidant Masterbatch	280 °c	Pipe, Extrusion	132±1 °c	1.05±0.05	4 gr/10min(2.16kg,190 °c)
29930	Polyethylene Based UV Stabilizer Masterbatch	280 °c	Extrusion, PP Woven Bag, PP Fiber, Blown Film	131±1 °c	1.05±0.05	18 gr/10min(2.16kg,190 °c)
39930	Polypropylene Based UV Stabilizer Masterbatch	300 °c	Extrusion, PP Woven Bag, PP Fiber, Blown Film	157±1 °c	1.05±0.05	15 gr/10min(2.16kg,230 °c)



LABORATORY

MASTERBATCH

Laboratory and Semi-Industrial (Pilot) Units:

The masterbatch quality control tests are being done according to U.S (ASTM) International and some other national standard systems. Through current equipped laboratory and continuous quality control, the production process of our masterbatch is monotonous and confronted to minimum rates of wastage or loss.

Whole testing process from raw materials arrival to final products are being done through Tis company laboratory.

The most important tests ,which could be done in this laboratory, are density checking ,masterbatch oxidation stability test (OIT) , The measurement of pigments spreading by compressed nets (Filter test) , Microscopic studying of wet pigments , meshing , optical and thermal stability tests.

There is possibility to simulate customer requests for various masterbatches colors by computer software in Tis laboratory.

There is possibility to produce Masterbatches in Semi-Industrial scale in order to supply specific customer requests for yarn and fiber , then customer's requested masterbatches would be checked by computerized simulation process for color synchronizing control in laboratory which would lead to semi-industrial production of masterbatches and after that would be transformed to BCF or POY yarns or CF fibers through this semi-industrial unit for delivering to customers.

TEXTILE
& PLASTIC
INDUSTRY





“AUTOMOTIVE”
NONWOVENS & CARPETS

www.zarifmosavar.com



ABOUT US

Zarif Mosavar Industrial Production Group (ZMIPG) with its wall to wall carpet production line was founded by Mr. Ali Mohammad Rejali and Mr. Seyed Mostafa Tabatabaei at Boroujen Industrial Zone in 1984. The Company uses the latest textile technologies as well as the most skilled workforce of the region which led to rapid development of the factory due to the great satisfaction and grat-itude of consumers with its annual production capacity of 50 million m² in production area of 93000 m² and ground area 165000 of m² as one of the biggest manufactures of wall to wall carpet, nonwoven, fibers, and their raw materials in the Middle East.



LIST OF THE PRODUCTS

- Wall to wall carpet (needle felt and tufted) for residential and industrial purposes
- Non-woven needle punched layers for automotive industry
- Polypropylene and polyester staple fibers

Honors & Certificates

- Paris Quality Award obtained in 1998
- Exemplary exporter in 1997, 2005 and 2007
- The Gold Prestige Plaque of selected Entrepreneurs in the 3rd Sheikh Bahaei Entrepreneurship Festival
- The Gold Prestige Plaque in the 1st National Iranian Brands
- The symbol of success in attracting consumers' confidence & satisfaction
- ISO 9001 and ISO TS certificates of standard

IS
THE
LARGEST
MANUFACTURER
OF
AUTOMOTIVE
CARPETS
IN IRAN

Zarif Mosavar

NON WOVENS CO.



AUTOMOTIVE NONWOVENS & CARPETS

Zarif Mosavar Company is the largest manufacturer of automotive carpets and nonwovens in Iran with the market share of 85% supplying the products to car manufacturers of Iran producing under the licenses of Kia Motors, Peugeot, and Renault with the ca-pacity of 10 million m² yearly. Zarif mosavar company producer of Needle punched nonwovens and carpets is capable of supplying the products from 100 gr/m² to 1500 gr/m² in all colours for following applications:

Headliners.

Floor and Trunk carpet.

Parcel shelf.

Wheel arc carpet.

And other needle punched Nonwovens and carpets as customers may require



RENAULT



PEUGEOT



KIA MOTORS



mazda

Product code	Application	Colour	Weight gr/m ²	Flammability (cm/min)	Thickness	Process	*	Fiber Type	Company
AK4	Floor Carpet	Gray	660	B±3s≤10	5.3±10	Carding Velour	No	Polyester	Kia
AK23/162	Headliners	Gray	235	≤100	2.7±.3	Carding Velour	No		Kia . Peugeot
AK24/162	Headliners	Beige	235	≤100	2.7±.3	Carding Velour	No		Peugeot
AK26L	Floor Carpet	Black	750	≤100	5.2±.5	Carding Velour Finishing	Yes		Peugeot
AK30	Parcel shelf	Black	250	≤100	5±.5	Carding	No		Peugeot
AK31	Parcel shelf	Black	100	≤100	3.3±.3	Carding Calender	No		Peugeot
AK41	Parcel shelf	Black	420	≤100	2.5±.5	Carding Finishing	Yes		Peugeot
AK42L	Trunk Trim	Black	280	≤120	2.5±.3	Carding Finishing	Yes		Peugeot
AK59	Floor Carpet	Gray	400	≤9	3.4±.4	Carding	No		Kia
AK54L2/160	Floor Carpet	Gray	650	≤10	3±.5	Carding Finishing	Yes		Kia
AK60L	Ribbed Floor Carpet	Gray	650	≤100	3.6±.6	Carding Finishing	Yes		Peugeot
AK63L	Ribbed Floor Carpet	Beige	650	≤100	3.6±.6	Carding Finishing	Yes		Peugeot
AK70	Floor Carpet	Gray	500	≤9	3.5±.5	Carding	No		Kia
AK72	Floor Carpet	Gray	750	≤100	5.5±.5	Carding Velour Finishing	Yes		Kia
AK90	Floor Carpet	Black	920	≤100	4.5±.5	Carding Finishing	Yes		Renault
AK91	Wheel Arc Carpet	Black	800	≤100	3.5±.5	Carding Finishing	Yes		Renault
AK92	Trunk Trim	Black	1100	≤100	5±.5	Carding Finishing	Yes		Renault
AK95	Parcel Shelf	Beige	230	≤100	2.7±.3	Carding Velour Calender	Yes		Peugeot
AK96	Headliners	Gray	230	≤100	2.7±.3	Carding Velour Calender	Yes		Peugeot
AK11/125	Parcel Shelf	Black	350	≤100	2.6±.5	Carding Velour	No		Peugeot
ZA603/137	Parcel Shelf	Gray	270	≤9	2.6±.5	Carding	No		Kia
ZA608/137	Parcel Shelf	Beige	330	≤9	2.6±.5	Carding	No		Peugeot
ZA612/122	Parcel Shelf	Gray	280	≤9	3.2±.4	Carding	No		Kia
ZA616	Parcel Shelf	Beige	235	≤9	2.6±.5	Carding	No		Peugeot
Ak100	Headliners Stitch Bonded	Gray	230	≤100	5.3±10	Carding Velour	No	Renault	

* Formability



“GEOSYNTHETIC”
Permeable Fabrics

www.zarifmosavar.com



ABOUT US

ALL THE WAY WITH YOU

Geotextiles are permeable fabrics which, when used in association with soil, have the ability to separate, filter, reinforce, protect or drain.

They have a wide range of applications and are currently used to advantage in many civil engineering applications including roads, airfields, railroads, embankments, retaining structures, reservoirs, canals, dams, bank protection and coastal engineering.

Since polypropylene geotextiles perform well when exposed to water and other inorganic compounds, they are for uses such as pond liners, bank weed control, liners for garden fountain systems, filtration, dividers in ponds, pile wraps, lagoon liners, turbidity curtains, or as in this case, an artificial habitat. Most of these applications are not technical in comparison to a beach reclamation system or a retaining wall, but they are practical and cost-efficient applications of geosynthetics, and their uses are growing.



USES

GEOSYNTHETICS

REINFORCEMENT:

Geosynthetics are installed beneath or between soil layers to improve the mechanical properties of soil layers by absorbing the tensile forces and minimising deformation. Geotextiles are used in applications such as retaining structures according to the principles of «reinforced soil», slope stabilization or for foundation reinforcement of earthen dams where the subsoil exhibits poor bearing capacity. The use of geosynthetics for reinforcement applications minimises expensive constructive measures and can reduce soil intermixing eliminating the need for additional soil layers.

SEPARATION:

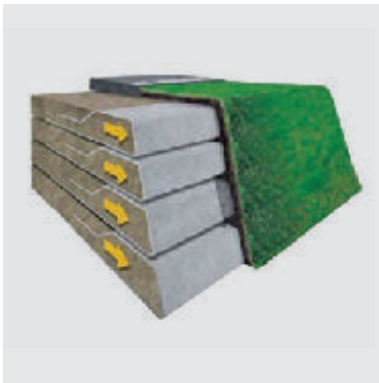
As a separation layer, nonwoven geotextiles are used to prevent adjacent soil layers or fill materials from intermixing.

Nonwoven geotextiles that exhibit a high elongation capacity are the materials of choice in most applications. The selection of a suitable product is dependent upon the base course grain size and the operational loads to be expected.

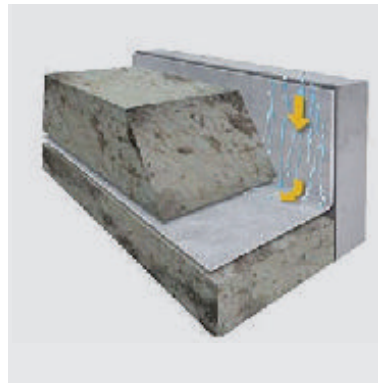
The main use of separation nonwovens are road and railway construction, hydraulic and landfill engineering and sport fields.

DRAINAGE:

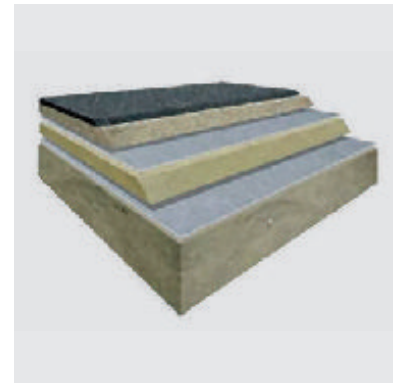
In the EN ISO standards, the drainage function is defined as «The collecting & transporting of precipitation, ground water and/or other fluids in the plane of the geotextile». Hydraulic properties are decisive for the overall performance of the entire construction, with the water flow capacity in the plane of the geotextile being the most important. The hydraulic properties of Zarif mosavar Geotextiles are designed to drain excess water off the construction - not by passing through the Zarif mosavar Geotextile as when used for filtration, but by flowing in the plane of the geotextile leading it away from the construction. The use of a drainage geotextile ensures ongoing drainage of fluids with minimum pressure loss.



REINFORCEMENT



SEPARATION



DRAINAGE



USES GEOSYNTHETICS

FILTRATION:

In filtration applications such as hydraulic engineering and drainage systems, nonwoven geotextiles are used to retain soil particles while allowing the passage of liquids through the filter media. There are two aspects to filtration that should be evaluated when designing.

The mechanical filter efficiency (does the fabric have sufficient soil retention capacity) and the hydraulic filter efficiency (does the water discharge without a hydraulic pressure build up). As with mineral filter layers, the geotextile thickness directly benefits the long-term mechanical and hydraulic efficiency of the filter.

CONTAINMENT:

Geosynthetic containment applications are those in which a textile in the form of a tube, bag or container, is used to encapsulate a construction material, such as soil or sand.

They perform project-specific functions such as protection, filtration and separation.

Nonwoven geotextiles are the primary products for these applications due to their high elongation capacity.

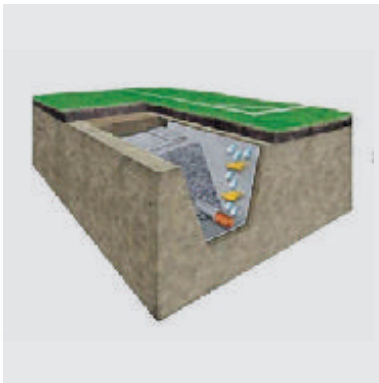
PROTECTION:

Geomembranes, structures, coated materials as well as related construction elements must often be protected from potential mechanical damage. Without suitable protection damage may occur from sharp edged objects such as stones due to the unevenness of the subsoil or even by the cover material.

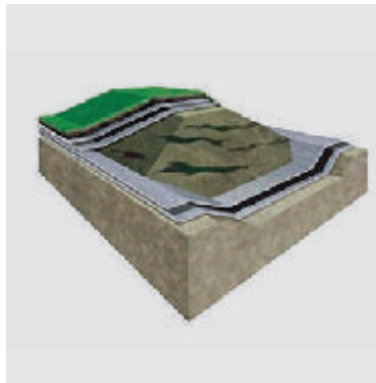
Mechanically bonded needle-punched nonwovens manufactured from polypropylene (PP) or polyester (PET) fibers are commonly used for protection layers. Specific to nonwoven geotextiles, the protection function is directly related to the thickness and mass per unit area, as a heavier and thicker nonwoven is more likely to provide better protection.

EROSION CONTROL:

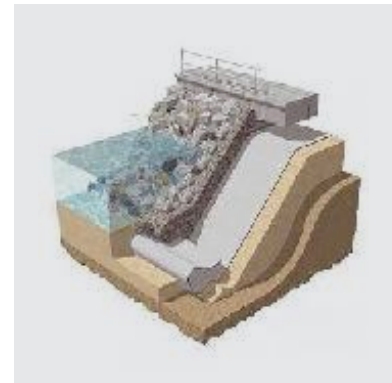
Geotextiles are used to prevent surface erosion. By preventing soil particles from being washed off slopes or channels, rapid vegetation is ensured when erosion control mats are used.



FILTRATION



PROTECTION



EROSION CONTROL



APPLICATIONS

GEOSYNTHETICS

Roads, Railways, Drainage Systems, Embankment Erosion, Landfills, Tunnels & Underground, Pipeline Protection, Shore & River Line Protection.

GEOBAG:

Zarif mosavar produces sewn bags of various sizes, constructed from nonwoven geotextile material of various specifications, which are aimed for filling with material such as sand. They are primarily used to easily transport fill material in hard to reach construction areas and to allow the deposit of fill material on weak soils.

NONWOVEN
GEOTEXTILE
MATERIAL





“GEOMEMBRANE
GEOTEXTILE
GEOCOMPOSITE”

www.zarifmosavar.com



ABOUT US

Yalda Company is a multi-function industrial trading company committed to keep its clients delighted by providing quality geosynthetic products and cost effective services. The need for reliable containment of liquids, solids and waste materials continues to increase as environmental demands and standards are elevated.

Our Geomembrane technology offers a wide range of materials capable of meeting these demands. Yalda Company supports a complete selection of geomembrane materials with design assistance, fabrication and installation services. We work with the engineering consultant or general contractor to en-sure the optimum design with the most efficient and cost-effective installation for any geomembrane ap-plication (HDPE & LLDPE).



PRODUCTS

YALDA COMPANY

Geosynthetics (Geomembrane, Geotextile, Geocomposite)

Geosynthetics has been known as the most popular and effective materials for industrial and engineering insulation since the last two decades.

Geomembranes

We are highly specialized in supplying and manufacturing HDPE / LLDPE polyethylene Geomembrane liners based upon international standards (GRI GM13) since many years ago. We've built a reputation of reliability through our dedication to providing the highest quality Geomembranes made from high quality Polyeth-ylene Resin, Carbon black & Antioxidant added for best UV protection and long life. We supply liners with Smooth/Smooth surfaces in green, blue and black colour. Our Geomembranes are manufactured to meet and exceed the test values, frequency of testing & functional requirements of the GRI CM13 specification which was established by Geomembrane Research Institute (GRI), USA.

Roll Lengths Based on Each Thickness, in width of 4.1 Mtrs			
Thickness	1.0 mm	1.5 mm	2.0 mm
Length	50 - 75 m	50 - 60 m	50 m



GEOMEMBRANE
GEOTEXTILE
GEOCOMPOSITE

Our Polyethylene Geomembranes are made from relatively thin continuous impermeable polymeric sheets being widely used as canal and pond liners. These products are resistant against UV and chemicals and have excellent flexibility and durability.

All these together have made our Geomembranes be widely used in exposed areas and places where long durability is essential and in industries such as Oil & Chemicals, Waste Liquids (e.g., sewage sludge), Landfill Sites, Agriculture, Aquiculture and Mining.



GEOMEMBRANE

TYPES

Our Geomembrane Sheets are generally used for containment of liquids, solids and waste materials and are of two types as follows:

- High Density Polyethylene Geomembranes (HDPE GMB)
- Linear Low Density Polyethylene Geomembranes (LLDPE GMB)

Our HDPE / LLDPE GMB technology offers a wide range of materials capable of meeting most of your

High Density Polyethylene Geomembranes (HDPE GMB)

Our HDPE GMB offers great ultraviolet protection and ageing resistance from the intense stresses of weather. Although, less flexible than its LLDPE counterpart, it still offers great elongation properties making it extremely cost-effective for many applications.

HDPE GMB Main Advantages

1. The chemical resistance of Our HDPE GMB is the best of any available geomembranes. Polyethylene is chemically resistant to a wide variety of chemicals including aromatic and halogenated hydrocarbons. They have been used successfully for years as primary and secondary landfill liners, in secondary containment applications and as liners for mining leach pads.
2. The stress crack resistance of Our HDPE GMB is outstanding. The appendix to ASTM D 5397, Single Point Notched Constant Tensile Load, is the test method most commonly specified for determination of stress crack resistance.
3. Permeability of Our HDPE GMB against gases and liquids is the lowest of any available geomembranes. This coupled with outstanding chemical and stress crack resistance combine to maximize the integrity of containment for any application.
4. Flexibility and high resistance against tearing, rubbing and puncturing.
5. High resistance against U.V. rays (Thermal stability the sunrays).
6. Excellent flexibility and elongation.
7. Easy installation/ transport / logistics.
8. Excellent solder ability.
9. Impact resistance.



APPLICATIONS

HDPE GMB MAIN

LANDFILLS

Solid & Municipal Waste, Hazard Waste, Construction & Demolition Waste, Industrial.

POWER

Retention Ponds, Cooling Water Ponds, Brine Ponds, Pumped Storage Reservoirs, Ash Repositories.

CONCRETE PROTECTION

Concrete Pipe & Sewer Lines, Trenches & Sumps, Wastewater Facilities, Tunnels, Manholes.

INDUSTRIAL

Tank Lining, Storm Water Runoff, Vertical Barriers, Secondary Containment.

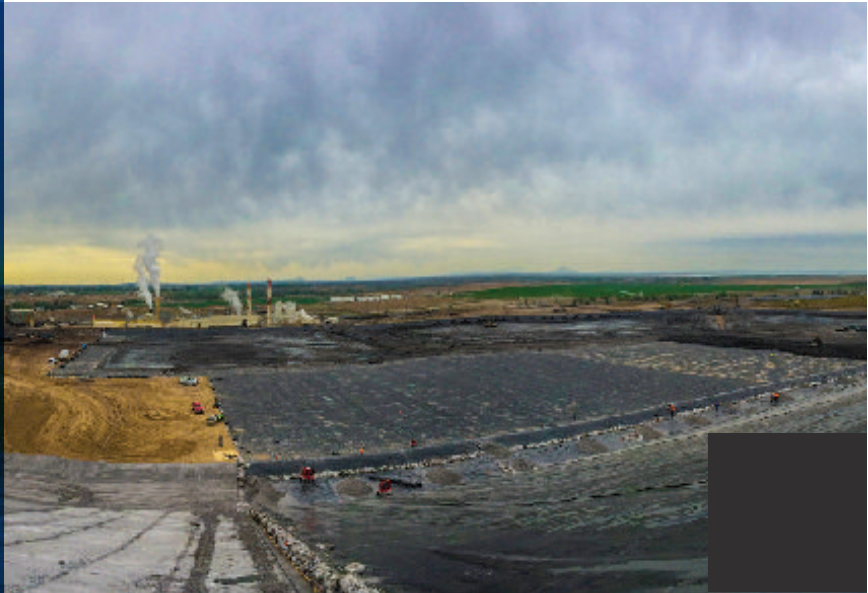
LIQUID CONTAINMENT

Water & Wastewater, Petro-Chemical, Agriculture/ Aquaculture pools, Simulated lakes, Aqua-culture Canal Lining, Dams, Floating Covers, Relaxing pools, Water storage constructions, Waste water storage constructions, Pool insulation, Water ways.

MINING

Heap Leach Pads, Solution Ponds, Treatment Lagoons.

LANDDILLS
POWER
INDUSTRIAL
MINING . . .



OTHERS

Golf Course Ponds, Decorative Ponds, Waterproofing, Simulated lakes & Constructions.

Linear Low Density Polyethylene Geomembranes (LLDPE GMB)

Our LLDPE GMB provides much of the same durability and resistance properties found in HDPE GMB, but with the added benefit of increased material flexibility because it is a lower-density polymer. This increased flexibility makes LLDPE GMB well suited to pre-fabrication into large panels, minimizing field work. Additionally, LLDPE GMB is often used in applications where long-term large settlements may be anticipated, such as landfill covers. Thanks to Our LLDPE GMB Flexibility and elongation, it can simply take the place of PVC Sheets and be used instead.

LLDPE GMB Main Applications

Solid Waste Landfills, Hazardous Waste Landfills Mining, Industrial and wastewater treatment, Lagoon Constructions Etc.

TECHNICAL DATA

Technical Specifications (LLDPE)

PARAMETER	METHOD	UNIT	RESULTS
			GM150L
Thickness	ASTM D5199	mm	1.5
Tensile Strength at Break	ASTM D6693	N.mm-1	Min.40
Tensile Elongation at Break	ASTM D6693	%	Min.800
2% Modulus	ASTM D5323	N.mm-1	Max.630
Puncture Resistance	ASTM D4833	N	Min.370
Tear Resistance	ASTM D1004	N	Min.150
Carbon Black Content	ASTM D1603	%	2.1
Carbon Black Dispersion	ASTM D5596	-	9 in cat.1



TECHNICAL DATA

Technical Specifications (HDPE)

PARAMETER	METHOD	UNIT	RESULTS		
			GM100H	GM150H	GM200H
Thickness	ASTM D5199	mm	1.00	1.50	2.00
Density	ASTM D1505	GR.ml ⁻¹	Min.0.940	Min.0.940	Min.0.940
Tensile Strength at Yield	ASTM D6693	KN.ml ⁻¹	Min.15	Min.22	Min.29
Tensile Strength at Break	ASTM D6693	KN.ml ⁻¹	Min.27	Min.40	Min.53
Tensile Elongation at Yield	ASTM D6693	%	Min.12	Min.12	Min.12
Tensile Elongation at Break	ASTM D6693	%	Min.700	Min.700	Min.700
Tear Resistance	ASTM D1004	N	Min.125	Min.187	Min.249
Puncher Resistance	ASTM D4833	N	Min.320	Min.480	Min.640
Carbon Black Content	ASTM D1603	%	2.1	2.1	2.1
Carbon Black Dispersion	ASTM D5596	-	9 in cat.1	9 in cat.1	9 in cat.1



GEOTEXTILES

DESCRIPTION

Geotextiles are permeable fabrics which, when used in association with soil, have the ability to separate, filter, reinforce, protect, or drain. Typically made from polypropylene or polyester.

In many cases, geotextiles replace or reduce the need to use natural aggregate construction materials providing both economic and environmental benefits.

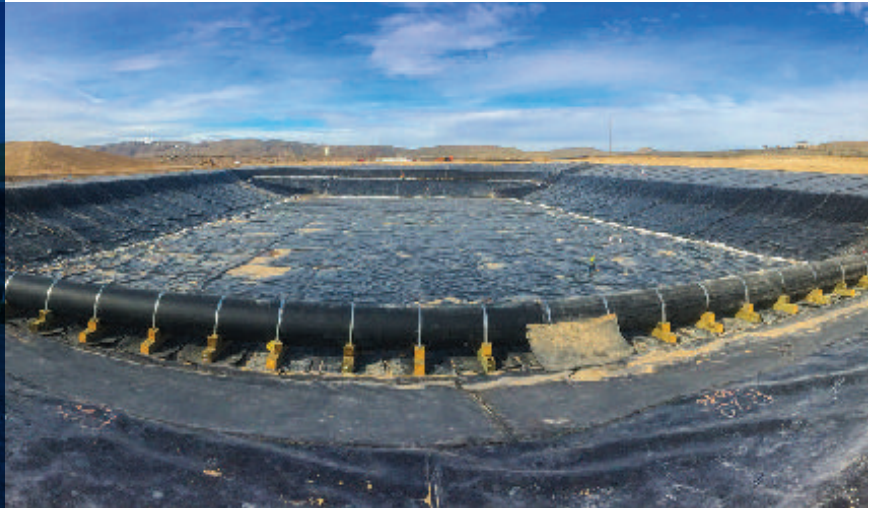
H.Tis Enterprise FZE offers a range of geotextiles including nonwoven and composites.

Our Nonwoven Geotextiles are made from polypropylene fibers that are needle-punched to form a dimensionally stable network and have a wide range of applications in civil environmental engineering and construction projects. Their uses include:

1. Filtration of soils in drainage applications by retaining soil particles while allowing for the free flow of water.
2. Separation and stabilization in road and railway construction.
3. Prevention of soil movement in erosion control measures.
4. Cushioning and protection in many containment projects.

They are available in varying strengths and thicknesses to ensure appropriate material selection for your project.

TO SPLIT FILTERING REINFORCEMENT PROTECTION DISCHARGE



Geotextile applications Geotextile Applications:

1. Road construction, highways.
2. Embankments. Asphalt repaving of roads.
3. Coastal & riverbank revetment systems.
4. Filtration.
5. Drainage.
6. Composites.
7. Protection for Geomembrane in landfills.

TEST	TEST METHOD	UNIT	M . A . R . V
Grab Strength	ASTM D-4632	N	450
Mass Per Unit Area	ASTM D-3776	g/m ²	140
Ultimate Elongation	ASTM D-4632	%	50
Asphalt Retention	Texas DOT Item 3099	l/m ²	1.2
Melting Point	ASTM D-276	C	150°



GEOCOMPOSITES

DESCRIPTION

Our Composite Geomembrane, as a kind of impervious material made through the combination of geotextile and geomembrane, is mainly used in water drainage and rib reinforcement.

Geocomposite Types We produce two types of Geocomposites including:

1. Three Layer Geocomposites

Two clothes plus one membrane

(Geotextile for protective use is applied on both sides of anti-seepage membrane).

The geotextile is made of Polypropylene or Polyester.

2. Two Layer Geocomposites

One cloth plus one membrane

(Geotextile for protective use is applied on one side of anti-seepage membrane). The geotextile is made of Polypropylene or Polyester.

Geocomposite Main Applications

1. Water conservation
2. Subways
3. Basement and Tunnels,
4. Tunnel Impermeable lining
5. Road
6. Highway
7. Railway Subgrade
8. Foundation Vertical Impermeable Layer
9. Construction Cofferdam
10. Irrigation Ditch,
11. Liquid Pool (pit, tomb)
12. Scrap Yard;
13. Saline Control in Subgrade
14. Waterproof Layer of Expansive Soil and Collapsible Loess
15. Roofing Leakage Preventio

Geocomposite Main Applications

1. High tensile
2. High bursting
3. High tear-pro strength
4. And high physical performance in general

Yalda Company supports a complete selection of Geomembrane and Geocomposite materials with design assistance, fabrication and installation services. We work with engineering consultant or general contractor to ensure the optimum design with the most efficient and cost-effective installation for any Geomembrane & Geocomposite application.





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