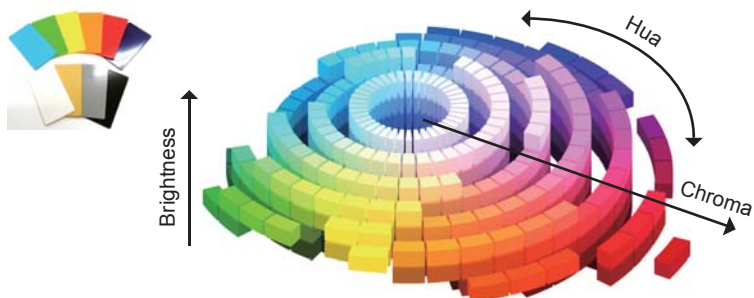


# Plastic Compound



## Color Customized Solution



## Customized Solution

- Basic Resin:  
PA6, PA66, PA610, PP, PC, etc

Customer's requirement

Market needs  
Required properties

Base

Virgin resins & Recycle resins

Fillers

Fibers / Minerals / Pigments /  
Modifiers / Stabilizers etc.

Tailor made compounds

Quality control with ISO 9001

## Typical grades

Base resin	Type	Grade name	Characteristics
PA6	Glass fiber reinforced	TR-132G55	GF 55%, High strength, High modulus
	Glass fiber reinforced	TR-1603XGF65	GF 65%, High strength, High modulus, High impact strength, Good appearance
	Carbon fiber reinforced	TR-120CF30	CF 30%
PA66	Glass fiber reinforced	TR-520G50	GF 50%, High strength, High modulus
	Carbon fiber reinforced	TR-520XCF30	CF 30%
PA610	Carbon fiber reinforced	TRZ-300CF30	CF 30%, Low water absorption, Low specific gravity
Semi-aromatic PA	Glass fiber reinforced	TRA-210G33	GF 33%, Low water absorption
		TRA-210GF55	GF 55%, Low water absorption
		TRA-100HCF30	CF 30%, Low water absorption, Low molding temperature
	Carbon fiber reinforced	TRA-210CF30	CF 30%, Low water absorption
		TRA-210CF40	CF 40%, Low water absorption
PP	Carbon fiber reinforced	TR-704CF30	CF 30%, Low specific gravity
PC	Carbon fiber reinforced	TR-760CF30	CF 30%
Phosphorescent	PP	RS-200 LG50-10	Phosphorescent pigment 10%
	PA12	RS-300 LG50-10	Phosphorescent pigment 10%
	PC	RS-500 LG50-10	Phosphorescent pigment 10%

# Plastic Compound



## General properties of Glass fiber reinforced grades

Item	Test method	Unit	PA6				PA66		Semi-aromatic PA			
			TR-132G55		TR-1603XGF65		TR-520G50		TRA-210G33		TRA-210GF55	
			Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet
Tensile stress	ISO 527-1,-2	MPa	240	170	265	190	240	185	195	190	260	250
Tensile strain		%	5	6	5.0	5.0	5	6	3.2	3.1	3.1	3.0
Flexural strength	ISO 178	MPa	370	260	410	310	380	285	280	270	390	370
Flexural modulus		GPa	15.1	9.3	19.3	14.1	13.6	10.0	10.8	10.5	18.6	18.9
Charpy impact strength	ISO 179-1	kJ/m <sup>2</sup>	17	23	32	32	17	22	12	12	21	18
Specific gravity	Collecting gas over water	-	1.62		1.78		1.57		1.78		1.64	
Mold shrinkage	Method	%	0.1		0.1		0.2		0.8		0.3	
			0.3		0.3		0.6		0.7		0.4	
Equilibrium water absorption	ISO 62	%	1.2		1.2		1.2		0.3		0.2	

## General properties of Carbon fiber reinforced grades



Item	Test method	Unit	PP	PC	PA6	PA66	PA610	Semi-aromatic PA										
			TR-704CF30		TR-760CF30		TR-120CF30		TR-520XCF30		TRZ-300CF30		TRA-100HCF30		TRA-210CF30		TRA-210CF40	
			Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet
Tensile stress	ISO 527-1,-2	MPa	95	165	162	240	150	230	192	195	190	260	225	240	220	281	259	
Tensile strain		%	1.4	1.9	1.9	5	5	2.8	2.9	3.2	3.1	4	5	2	2	2.6	2.5	
Flexural strength	ISO 178	MPa	165	257	252	350	220	330	277	280	270	400	335	340	325	403	386	
Flexural modulus		GPa	13.5	19.0	20	16.8	10.0	18.4	14.3	10.8	10.5	19.4	16.4	20.5	19.3	28.4	27.9	
Charpy impact strength	ISO 179-1	kJ/m <sup>2</sup>	6.5	8.4	4.5	12	15	10.2	11.6	12	12	11	12	7	7	7.2	7.3	
Specific gravity	Collecting gas over water	-	1.06	1.32	1.27	1.21	1.78	1.26	1.29	1.33								
Mold shrinkage	Method	%	0.3		0.2		0.2		0.2		0.8		0.1		0.2		0.2	
			0.7		0.4		0.5		0.6		0.7		0.3		0.7		0.6	
Equilibrium water absorption	ISO 62	%	-	0.17	2.0	0.93	0.3	0.9	0.4	0.3								