

INNOVATIVE MATERIALS

INNOVATIVE POLYMERS FOR THE SPORTING GOODS INDUSTRY

- **Innovative Performance Rubber Compounds**
- **Performance Cushioning Foams**
- **Creative and Unique Color & Application**
- **Global Technical Support,
including all Major Asian Production Countries**

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Price List

No	Material Name	Unit Price (USD)	No	Material Name	Unit Price (USD)
1	Clear(Crystal Clear) Rubber		19	MK-2500	
2	SM Clear Rubber		20	ASR-2003	
3	CM Clear Rubber		21	SAR-2004	
4	Sticky Clear Rubber		22	CSR-2005	
5	HD Clear Rubber		23	BIM-50	
6	INJ Clear Rubber		24	BHD-45	
7	Tinted Clear Rubber		25	BHD-45N	
8	Novo Clear Rubber		26	MEDO	
9	Photo Glow Clear Rubber		27	ADO	
10	Marble Clear Rubber		28	MK-878	
11	Sparkle Clear Rubber		29	HES-60	
12	Aurora Clear Rubber		30	NATURAL	
13	Pearl Clear Rubber		31	MULTI	
14	Metallic Clear Rubber		32	GP-50	
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16	Multi Clear Rubber		34	GP-300	
17	Dream Clear Rubber		35	GP-350	
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※ Above price will be negotiable depend upon order volume.

※ Above price based on F.O.B. Busan.

※ Above price is not including pigment.

I . BASE CLEAR RUBBER

- 1. Clear(Crystal Clear) Rubber**
(Transparent priority 1st)
- 2. SM Clear Rubber**
(Transparent priority 2nd)
- 3. CM Clear Rubber**
(Transparent priority 3rd)

Clear(Crystal Clear) Rubber

1. BENEFITS ;

- 1) **Transparent priority 1st**
- 2) High abrasion
- 3) Superior bonding with shoe's components
- 4) **No-buffing** system for clear rubber to see better bonding.
- 5) **Vacuum packing be** able to keep original physical properties while it's just produced for 12 months.

It will be able to prevent yellowishing caused by whole kinds of outer effects.

- 6) Any color

2. TYPICAL PROPERTIES

DIVISION		REMARKS
Main Polymer	Synthetic Rubber	
Appearance	Transparent Solid Sheet	
Specific Gravity (g/cc)	1.02 ± 0.05	
Moisture Contents (%)	Less than 0.1	Temp.100 °C × 3mins
Ash Contents (%)	10 ± 1	DIN 55 921
Standard Storage Stability	6 months	
Vacuum Packing Storage	12 months	

3. PHYSICAL PROPERTIES

DIVISION		Vacuum packed for 6 months	REMARKS
Hardness (Shore's A)	65 ~ 70	68	◇ Press Time 150 °C × 6 ~ 7mins
300% Md. (Kgf/cm ²)	70	70	
Tear Strength(Kgf/cm)	35 ~ 40	39	
Tensile Strength(Kgf/cm ²)	140	143	
Elongation (%)	400 ~ 600	560	
Specific Gravity (g/cc)	1.06 ~ 1.08	1.07	
Abrasion Loss (Akron, cc)	0.15 ~ 0.25	0.16	

SM Clear Rubber

1. BENEFITS ;

- 1) **Transparent priority 2nd**
- 2) High abrasion
- 3) Superior bonding with shoe's components
- 4) **No-buffing** system for clear rubber to see better bonding.
- 5) **Vacuum packing be** able to keep original physical properties while it's just produced for 12 months.
It will be able to prevent yellowishing caused by whole kinds of outer effects.
- 6) Any color

2. TYPICAL PROPERTIES

DIVISION		REMARKS
Main Polymer	Synthetic Rubber	
Appearance	Transparent Solid Sheet	
Specific Gravity (g/cc)	1.02 ± 0.05	
Moisture Contents (%)	Less than 0.1	Temp.100 °C × 3mins
Ash Contents (%)	10 ± 1	DIN 55 921
Standard Storage Stability	6 months	
Vacuum Packing Storage	12 months	

3. PHYSICAL PROPERTIES

DIVISION		Vacuum packed for 6 months	REMARKS
Hardness (Shore's A)	65 ~ 70	68	◇ Press Time 150 °C × 6 ~ 7mins
300% Md. (Kgf/cm ²)	70	65	
Tear Strength(Kgf/cm)	35 ~ 40	38	
Tensile Strength(Kgf/cm ²)	135	140	
Elongation (%)	400 ~ 600	550	
Specific Gravity (g/cc)	1.07 ~ 1.09	1.07	
Abrasion Loss (Akron, cc)	0.15 ~ 0.25	0.18	

CM CLEAR RUBBER

1. BENEFITS ;

- 1) **Transparent priority 3rd**
- 2) High abrasion
- 3) Superior bonding with shoe's components
- 4) **No-buffing** system for clear rubber to see better bonding.
- 5) **Vacuum packing be** able to keep original physical properties while it's just produced for 12 months.
It will be able to prevent yellowishing caused by whole kinds of outer effects.
- 6) Any color



2. TYPICAL PROPERTIES

DIVISION		REMARKS
Main Polymer	Synthetic Rubber	
Appearance	Transparent Solid Sheet	
Specific Gravity (g/cc)	1.02 ± 0.05	
Moisture Contents (%)	Less than 0.1	Temp.100 °C × 3mins
Ash Contents (%)	10 ± 1	DIN 55 921
Standard Storage Stability	6 months	
Vacuum Packing Storage	12 months	

3. PHYSICAL PROPERTIES

DIVISION		Vacuum packed for 6 months	REMARKS
Hardness (Shore's A)	65 ~ 70	67	◇ Press Time 150 °C × 6 ~ 7mins
300% Md. (Kgf/cm ²)	70	70	
Tear Strength(Kgf/cm)	35 ~ 40	37	
Tensile Strength(Kgf/cm ²)	135	140	
Elongation (%)	400 ~ 600	550	
Specific Gravity (g/cc)	1.07 ~ 1.09	1.08	
Abrasion Loss (Akron, cc)	0.15 ~ 0.25	0.18	

1. Clear(Crystal Clear) Rubber		
		MEMO

2. SM Clear Rubber		
		MEMO

3. CM clear Rubber		
		MEMO

II . MODIFIED CLEAR RUBBER

- 1. Sticky Clear Rubber**
- 2. HD Clear Rubber**
- 3. INJ Clear Rubber**
- 4. Tinted Clear Rubber**
- 5. Novo Clear Rubber**
- 6. Photo Glow Clear Rubber**
- 7. Marble Clear Rubber**
- 8. Sparkle Clear Rubber**
- 9. Aurora Clear Rubber**
- 10. Pearl Clear Rubber**
- 11. Metallic Clear Rubber**
- 12. Mosaic Clear Rubber**
- 13. Multi Clear Rubber**
- 14. Dream Clear Rubber**

Sticky Clear Rubber

1. BENEFITS ;

- 1) Similar transparency / physical properties like M Clear Rubber
- 2) **High grip** in wet & dry conditions
- 3) Any color

2. TYPICAL PROPERTIES

DIVISION		REMARKS
Main Polymer	Synthetic Rubber	
Appearance	Transparent Solid Sheet	
Specific Gravity (g/cc)	1.00 ± 0.05	
Moisture Contents (%)	Less than 0.1	Temp.100 °C × 3mins
Ash Contents (%)	10 ± 1	DIN 55 921
Standard Storage Stability	6 months	
Vacuum Packing Storage	12 months	

3. PHYSICAL PROPERTIES

DIVISION		REMARKS
Hardness (Shore's A)	61 ~ 62	◇ Press Time 150 °C × 6 ~ 7mins
300% Md. (Kgf/cm ²)	57	
Tear Strength(Kgf/cm)	40	
Tensile Strength(Kgf/cm ²)	130	
Elongation (%)	560	
Specific Gravity (g/cc)	1.045	
Abrasion Loss (Akron, cc)	0.17	

4. COMPARISON

DIVISION		Natural rubber	Sticky Clear Rubber	REMARKS
Slip Test (Slip Angle)	Dry	1.02(45.5)	2.75(70)	Slip tester No. 162-SLH with glass plate
	Wet	2.05(64)	2.75(70)	

1-1. Sticky Clear Rubber(Base)		
		MEMO

1-2. Sticky Clear Rubber(Sparkle Blue)		
		MEMO

1-3. Sticky Clear Rubber(Sparkle Red)		
		MEMO

HD Clear Rubber

1. BENEFITS ;



- 1) Excellent physical properties (refer to below spec.)
- 2) Suitable for soccer / golf shoes
- 3) Any color

2. TYPICAL PROPERTIES

DIVISION		REMARKS
Main Polymer	Synthetic Rubber	
Appearance	Transparent Solid Sheet	
Specific Gravity (g/cc)	1.05 ± 0.05	
Moisture Contents (%)	Less than 0.1	Temp.100 °C × 3mins
Ash Contents (%)	10 ± 1	DIN 55 921
Standard Storage Stability	6 months	
Vacuum Packing Storage	12 months	

3. PHYSICAL PROPERTIES

DIVISION		REMARKS
<u>Hardness (Shore's A)</u>	<u>87 ~ 88</u>	◇ Press Time 150 °C × 6 ~ 7mins
300% Md. (Kgf/cm ²)	-	
Tear Strength(Kgf/cm)	60	
Tensile Strength(Kgf/cm ²)	140	
Elongation (%)	300	
Specific Gravity (g/cc)	1.092	
Abrasion Loss (Akron, cc)	0.15	

2-1. HD Clear Rubber(Base)		
		MEMO

2-2. HD Clear Rubber(Tinted Color)		
		MEMO

2-3. HD Clear Rubber(Tinted Color)		
		MEMO

INJ Clear Rubber

1. BENEFITS ;



- 1) High abrasion
- 2) Superior bonding with shoe's components by using injection type
- 3) No-buffing system for clear rubber to see better bonding
- 4) Any color

2. TYPICAL PROPERTIES

DIVISION		REMARKS
Main Polymer	Synthetic Rubber	
Appearance	Transparent Solid Sheet	
Specific Gravity (g/cc)	1.02 ± 0.05	
Moisture Contents (%)	Less than 0.1	Temp.100 °C × 3mins
Ash Contents (%)	10 ± 1	DIN 55 921
Standard Storage Stability	6 months	
Vacuum Packing Storage	12 months	

3. PHYSICAL PROPERTIES



DIVISION		REMARKS
Hardness (Shore's A)	65 ~ 70	◇ Press Time 150 °C × 6 ~ 7mins
300% Md. (Kgf/cm ²)	70	
Tear Strength(Kgf/cm)	35 ~ 40	
Tensile Strength(Kgf/cm ²)	140	
Elongation (%)	400 ~ 600	
Specific Gravity (g/cc)	1.06 ~ 1.08	
Abrasion Loss (Akron, cc)	0.15 ~ 0.25	

3-1. INJ Clear Rubber(Base)		
		MEMO



3-2. INJ Clear Rubber(Tinted Color)		
		MEMO

3-3. INJ Clear Rubber(Tinted Color)		
		MEMO

4-1. Tinted Clear Rubber		
		MEMO

4-2. Tinted Clear Rubber		
		MEMO

4-3. Tinted Clear Rubber		
		MEMO

4-4. Tinted Clear Rubber		
		MEMO

Novo Clear Rubber

1. BENEFITS ;

- 1) It gives more stable physical properties such as tear strength, traction, tensile strength and heat-resistance than "M-Clear Rubber".
- 2) Perfect bonding strength with normal rubber
- 3) Cost saving remarkably by reducing reject rate, easier working processes.
- 4) Applied to the foxing tape, toe-guard, calender and mold sales in hot-air vulcanizing type shoe manufacturing without bonding problems.
- 5) Any color

2. TYPICAL PROPERTIES

DIVISION		REMARKS
Main Polymer	Synthetic Rubber	
Appearance	Transparent Solid Sheet	
Specific Gravity (g/cc)	1.07 ± 0.02	
Moisture Contents (%)	Less than 0.1	Temp.100℃ × 3mins
Ash Contents (%)	10 ± 1	DIN 55 921
Standard Storage Stability	6 months	
Vacuum Packing Storage	12 months	

3. PHYSICAL PROPERTIES

DIVISION		REMARKS
Hardness (Shore's A)	65 ~ 70	◇ Press Time 150℃ × 6 ~ 7mins
300% Md. (Kgf/cm ²)	48 ~ 50	
Tear Strength(Kgf/cm)	40 ~ 45	
Tensile Strength(Kgf/cm ²)	130 ~ 150	
Elongation (%)	600 ~ 700	
Specific Gravity (g/cc)	1.08 ~ 1.10	
Abrasion Loss (Akron, cc)	0.20 ~ 0.25	

5. Novo Clear Rubber(Base)		
		MEMO

7. Photo glow Clear Rubber		
		MEMO

8. Marble Clear Rubber		
		MEMO

9-1. Sparkle Clear Rubber		
		MEMO

9-2. Sparkle Clear Rubber		
		MEMO

10. Aurora Clear Rubber		
		MEMO

11-1. Pearl Clear Rubber		
		MEMO

11-2. Pearl Clear Rubber		
		MEMO

12-1. Metallic Clear Rubber		
		MEMO

12-2. Metallic Clear Rubber		
		MEMO