

Ketentuan Vulcanizing Silicone Rubber

ELEKTROPLATING

no	nama bahan	voltase	durasi (menit)
1.	Degreasing	6 – 8	0,5
2.	Tembaga	0,5 – 1	15 – 20
3.	Nikel	2 – 2,5	5 – 10
4.	Perak	0,4 – 1	2 – 5
5.	Emas	2,6 – 3,2	2 – 5

Ketentuan Elektroplating



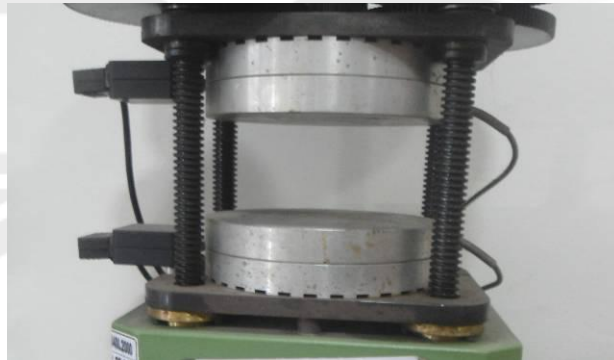
Timbangan Perhiasan



Pisau Bedah Kedokteran Gigi



Mold Frame



Parallel Plate Mesin Vulcanizer Diameter 200 mm

### Spesifikasi Verowhite – Fullcure830

Property	ASTM	Metric		Imperial	
Tensile Strength	D-638-03	MPa	50	psi	7221
Modulus of Elasticity	D-638-04	MPa	2495	psi	361775
Elongation at Break	D-638-05	%	20	%	20
Flexural Strength	D-790-03	MPa	75	psi	10817
Flexural Modulus	D-790-04	MPa	2137	psi	309865
Izod Notched Impact	D-256-06	J/m	24	ft lb/in	.45
Shore Hardness	Scale D	Scale D	83	Scale D	83
Rockwell Hardness	Scale M	Scale M	81	Scale M	81
HDT at 0.45 Mpa	D-648-06	deg C	43	deg F	109
HDT at 1.82 Mpa	D-648-07	deg C	40	deg F	104
Tg	DMA, E''	deg C	58	deg F	136
Ash Content	USP 28	%	<0.3	%	<.03
Water Absorption	D570-98 24 Hr	%	1.15	%	1.15

### Spesifikasi VeroBlue – Fullcure840

Property	ASTM	Metric		Imperial	
Tensile Strength	D-638-03	MPa	55	psi	7990
Modulus of Elasticity	D-638-04	MPa	2740	psi	397300
Elongation at Break	D-638-05	%	20	%	20
Flexural Strength	D-790-03	MPa	84	psi	12122
Flexural Modulus	D-790-04	MPa	1983	psi	287535
Izod Notched Impact	D-256-06	J/m	24	ft LB/in	.04
Shore Hardness	Scale D	Scale D	83	Scale D	83
Rockwell Hardness	Scale M	Scale M	81	Scale M	81
HDT at 0.45 Mpa	D-648-06	deg C	49	deg F	120
HDT at 1.82 Mpa	D-648-07	deg C	45	deg F	113
TG	DMA, E''	deg C	49	deg F	120
Ash Content	USP 28	%	<0.3	%	<0.3
Water Absorption	D570-98 24 Hr	%	1.5	%	1.5

### Spesifikasi VeroGrey – Fullcure850

Property	ASTM	Metric		Imperial	
Tensile Strength	D-638-03	MPa	60	psi	8700
Modulus of Elasticity	D-638-04	MPa	3000	psi	435000
Elongation at Break	D-638-05	%	15	%	1.5
Flexural Strength	D-790-03	MPa	95	psi	13775
Flexural Modulus	D-790-04	MPa	3000	psi	435000
Izod Notched Impact	D-256-06	J/m	25	ft LB/in	.05
Shore Hardness	Scale D	Scale D	86	Scale D	86
Rockwell Hardness	Scale M	Scale M	49	Scale M	49
HDT at 0.45 Mpa	D-648-06	deg C	49	deg F	120
HDT at 1.82 Mpa	D-648-07	deg C	47	deg F	117
TG	DMA, E''	deg C	56	deg F	134
Ash Content	USP 28	%	0.3	%	0.3
Water Absorption	D570-98 24 Hr	%	1.1	%	1.1

### Spesifikasi VeroBlack – Fullcure870

Property	ASTM	Metric		Imperial	
Tensile Strength	D-638-03	MPa	51	psi	7352
Modulus of Elasticity	D-638-04	MPa	2192	psi	317840
Elongation at Break	D-638-05	%	18	%	18
Flexural Strength	D-790-03	MPa	80	psi	11542
Flexural Modulus	D-790-04	MPa	2276	psi	330020
Izod Notched Impact	D-256-06	J/m	24	ft LB/in	0.45
Shore Hardness	Scale D	Scale D	83	Scale D	83
Rockwell Hardness	Scale M	Scale M	81	Scale M	81
HDT at 0.45 Mpa	D-648-06	deg C	47	deg F	117
HDT at 1.82 Mpa	D-648-07	deg C	43	deg F	109
TG	DMA, E''	deg C	63	deg F	145
Ash Content	USP 28	%	0.005	%	0.005
Water Absorption	D570-98 24 Hr	%	1	%	1

### Spesifikasi DurrusWhite – Fullcure430

Property	ASTM	Metric		Imperial	
Tensile Strength	D-638-03	MPa	21	psi	3089
Modulus of Elasticity	D-638-04	MPa	1136	psi	164691
Elongation at Break	D-638-05	%	44	%	44
Flexural Strength	D-790-03	MPa	33	psi	4814
Flexural Modulus	D-790-04	MPa	1026	psi	148785
Izod Notched Impact	D-256-06	J/m	44	ft LB/in	0.83
Shore Hardness	D-2240-03	Scale D	76	Scale D	76
Rockwell Hardness	D-785-03	Scale M	97	Scale M	97
HDT at 0.45 Mpa	D-648-06	deg C	36	deg F	98
HDT at 1.82 Mpa	D-648-07	deg C	33	deg F	91
TG	DMA, E''	deg C	36	deg F	97
Ash Content	NA	%	<0.2	%	<0.2
Water Absorption	D570-98 24 Hr	%	1.7	%	1.7

## Spesifikasi Material ABS-M30

Mechanical Properties	ASTM	Metric		Imperial	
Tensile Strength	D-638	MPa	36	psi	5200
Tensile Modulus	D-638	MPa	2413	psi	350,000
Tensile Elongation	D-638	%	4	%	4
Flexural Stress	D-790	MPa	61	psi	8800
Flexural Modulus	D-790	MPa	2317	psi	336,000
Flexural Elongation	D-790	%	52	%	52
IZOD Impact, notched (Method A, 23°C)	D256	J/m	139	ft-lb/in	2.6
IZOD Impact, notched (Method A, 23°C)	D256	J/m	283	ft-lb/in	5.3
<b>Thermal Properties</b>					
Heat Deflection (HDT) @ 66 psi, 0.125", unannealed	D-648	deg C	96	deg F	204
Heat Deflection (HDT) @ 264 psi 0.125", unannealed	D-648	deg C	82	deg F	180
Vicat Softening Temp. (Rate B/50)	D1525	deg C	99	deg F	210
Coefficient of Thermal Expansion (flow, -40F to 100F)	E831	mm / mm / deg C	8.82E-05	in / in / deg f	4.9E-05
Coefficient of Thermal Expansion (xflow, -40F to 100F)	E831	mm / mm / deg C	8.46E-05	in / in / deg f	4.7E-05
Glass Transition (Tg)	DSC(SSYS)	deg C	108	deg F	226
Melt Point*	---				
<b>Other Properties</b>		<b>Value</b>			
Specific Gravity	D792	1.04			
Vertical Burning Test	UL94 - HB	mm	.85	in	0.06
Rockwell Hardness	D-785	109.5			
Dielectric S	IEC 60112	kV/mm	28.0		

**Spesifikasi PLUS (TangoPlus – Fullcure930/ TangoBlackPlus – Fullcure980)**

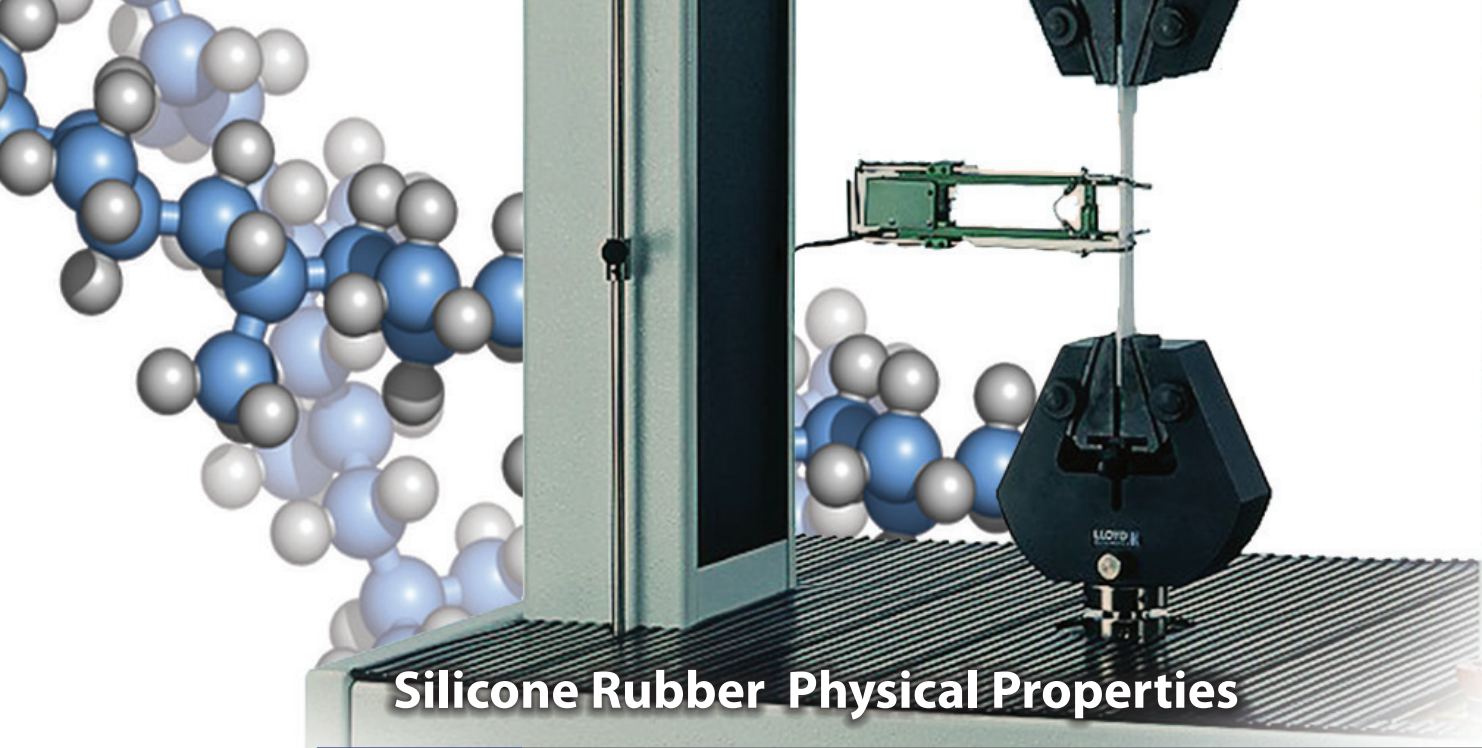
Property	ASTM	Metric		Imperial	
Tensile Strength at Break	D-412	MPa	1.5	psi	211
Modulus of Elasticity @ 20% Strain	D-413	MPa	0.1	psi	21
Modulus of Elasticity @ 30% Strain	D-414	MPa	0.2	psi	27
Modulus of Elasticity @ 50% Strain	D-415	MPa	0.3	psi	38
Elongation at Break	D-412	%	218	%	218
Compressive Set	D-395	%	4	%	4.4
Shore A Hardness	D-2240	Scale A	27	Scale A	27
Ross Flex	D-1052		Above 150000+		Above 150000+
Tensile Tear Resistance	D-624	Kg/cm	3	LB/in	20
TG	DSC -80°C+100°C	deg C	-10	deg F	15

**Spesifikasi Flexible GREY (TangoGrey – Fullcure950)**

Property	ASTM	Metric		Imperial	
Tensile Strength at Break	D-412	MPa	4	psi	632
Elongation at Break	D-412	%	47	%	47
Compressive Set	D-395	%	1	%	1
Shore A Hardness	D-2240	Scale A	75	Scale A	75
Tensile Tear Resistance	D-624	Kg/cm	10	LB/in	54
TG	DSc -80°C+100°C	deg C	3	deg F	37

**Spesifikasi Flexible BLACK (TangoBlack – Fullcure970)**

Property	ASTM	Metric		Imperial	
Tensile Strength at Break	D-412	MPa	2	psi	290
Elongation at Break	D-412	%	48	%	48
Compressive Set	D-395	%	1	%	1
Shore A Hardness	D-2240	Scale A	61	Scale A	61
Tensile Tear Resistance	D-624	Kg/cm	4	LB/in	21
TG	DSc -80°C+100°C	deg C	-11	deg F	13



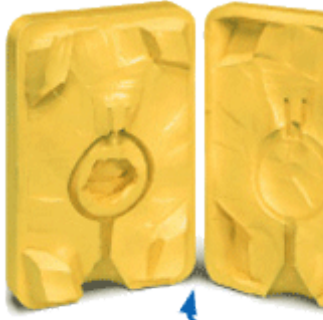
## Silicone Rubber Physical Properties

	Super High Strength™	Gelato™	SuperStretch™	Econosil®	VLT®	Rapido®
Shore A Hardness	38 - 40	38 - 40	28	48 - 50	38 - 40	38 - 40
Vulcanizes at	165° - 176°C / 330° - 350°F	165° - 176°C / 330° - 350°F	165° - 176°C / 330° - 350°F	165° - 176°C / 330° - 350°F	Variable - from 82°C / 180°F to 71°C / 160°F	93°C / 200°F
Rubber Shrinkage*	Medium 2.3%	Medium 2.3%	Low 1.3%	Low 1.1%	Very Low 0.1%	Very Low 0.1%
Elongation before break	667%	667%	900%	555%	614%	614%
Tensile Strength before break	8.3 n/mm <sup>2</sup> 1204 psi	8.3 n/mm <sup>2</sup> 1204 psi	7.7 n/mm <sup>2</sup> 1,109 psi	6.2 n/mm <sup>2</sup> 897 psi	8.9 n/mm <sup>2</sup> 1,289 psi	8.9n/mm <sup>2</sup> 1,289 psi
Tear Strength before break	21.2 n/mm 121 lbs./ in.	21.2 n/mm 121 lbs./ in.	19.2 n/mm 110 lbs./in.	19.4 n/mm 111 lbs./in.	18.2 n/mm 104 lbs./in.	18.2 n/mm 104 lbs./ in.
Uses	High Strength, General Purpose	High Strength, General Purpose	Elastic inserts, extreme undercuts, cores and plugs	Economy grade Firm molds, filigree & thin channels, high pressure	Low tempera- ture for resin CAD CAM, RP & SL models	FAST 15 minute molds High Strength, Gen- eral Purpose
Color	Tan	Pistachio, Lemon, Peach, Fuschia, Violet & Blue	Violet	Brick Red	Blue Green	Marigold

\* Special note about shrinkage rates: The figures given for this and all other rubber molding compounds are for the rubber mold itself, not the wax pattern it produces or the final casting produced from the wax pattern. The same rubber compound molded around the same metal master model can produce highly variable final casting shrinkage rates depending on the moldmaker & caster's skill, knowledge, precision and attention to detail. Final casting shrinkage is the result of the jewelry manufacturer's procedures.

# Castaldo Gelato

## Super High Strength Molding Rubber



### Mold cutting is easy!

Castaldo® Gelato® Super High Strength Silicone Jewelry Molding Rubber ***cuts like butter***. It resists tearing and is strong enough to make complex molds that are ***stronger*** than any other silicone molding rubber on the market. ***Molds last and last.***

### Just look at the shine!

A shiny finish on your molds means a shiny finish on your waxes. That means ***less polishing*** of your castings.



### Molds self release!

There is no need for messy mold release spray.

★ ***Increase Productivity***

★ ***Speed Production***

★ ***You will love it!***

### Convenient packaging.

Castaldo Super High Strength Silicone Jewelry Molding Rubber is available in strips 3/8" x 2 7/8" x 18" ( 6 mm x 7.3 cm x 45.7 cm ). Packed in boxes containing 5 lbs. ( 2.27 Kg. )

each. **Doublewide** is 18" x 5 3/4" x approximately 3/8" / 45.7 cm x 14.5 cm x approximately 6 mm and is packaged in attractive, consumer oriented boxes weighing 10 lbs. / 4.5 kg each. Other sizes are available upon request.

### Gelato™ rainbow colors

Available in standard tan color and the exciting new Gelato rainbow of colors!



Item #800 Tan, (Standard)



Item #801 Pistachio, ***Pistacchio, Pistachreo, Pistache, Pistazie***



Item #802 Lemon, ***Limone, Limon, Citrón, Zitrone***




Item #803 Peach, ***Melocotón, Pesca, Pêche, Pfirsich***




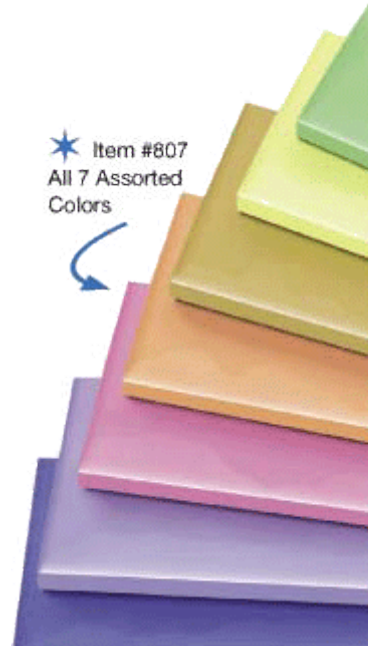
Item #804 Fuchsia, ***Fucsia, Fucsia, Fuchsia, Fuchsie***



Castaldo Super High Strength Silicone Jewelry Molding Rubber gives waxes a **smooth, shiny finish** that won't stick to the mold. And shiny waxes mean **less finishing!**

 Item #805  
Violet, **Violetta**, *Violéta*, Violette, **Veilchen**

 Item #806  
Blue, **Azzurro**, *Azul*, Bleu, **Blau**



**Mold packing is easy!**

All you have to do is spread and press it in with your fingers. Just like putty.

