

Silicone rubbers and alginates
for special effects & body casting

Special effects

Zhermack supplies the cinema industry with silicone rubbers and alginates used to reproduce parts of the body and facial features for special effects (masks, wounds, the application of special effects to actors, etc.) and to reproduce special scenery and settings.

Easy working, ductility, and the possibility of using a wide range of specific colour pigments are the key benefits we offer to users in the movie industry.



Body Casting

RTV-2 silicones and alginates are the most widely used materials for the reproduction of body parts in both the cinematographic and hobby fields and mould making.

The body casting process (also referred to as life casting) involves copying one part of the body and the subsequent reproduction in cement, wax, gypsum, resins, etc.

Zhermack produces two families of products for the body casting process:

- RTV-2 silicone for the production of reusable moulds
- Alginates for the production of disposable moulds



1. Technical characteristics

Zhermack's RTV2 poly addition silicone rubbers deliver:

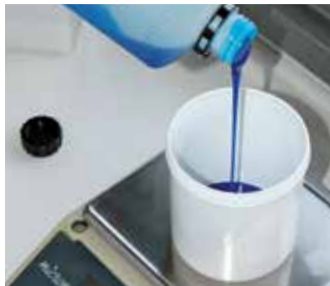
- Excellent mechanical characteristics (flexibility, tear resistance)
- Excellent dimensional stability (shrinkage of addition silicone rubbers < 0.1%; shrinkage of condensation silicone rubbers < 1%)
- Extra-long working life
- High precision in the reproduction of details and undercuts
- Compatibility with a wide range of materials (resins, plastics, waxes, cements, metals, etc.) and biocompatibility
- Resistance to extreme temperatures (-40° C / 210° C)
- Ease of use (no heat needed as Zhermack silicone rubbers vulcanise at room temperature)

2. Instructions for use

The two components may only be used together if they have the same batch number.

Before you pour out the two components, please stir them thoroughly in their original containers

On a scale, weigh out an equal quantity of base and catalyst (e.g. 100 g of catalyst and 100 g of base; the end result is not affected by errors of up to 5%)



Mix vigorously until the product assumes a uniform color. Once the product is thoroughly mixed, pour it, preferably from 30 cm above the container, on to one spot (this makes it easier for air to escape from the mix). Curing begins once A and B have been mixed. This marks the beginning of the pot life, so be sure to process the material as soon as possible. If you wish to de-gas with a vacuum chamber, make sure everything is set up and ready before starting the mixing. Curing time is affected by the room temperature – faster when warmer, slower when cool. **These instructions apply only to RTV2 poly addition silicone rubbers.**



3. Packs

Depending on the product, Zhermack addition silicone rubbers are available in all or some of the following packs:

ADDITION SILICONE RUBBERS	
Packs	Packaging
200 kg + 200 kg	
25 kg + 25 kg	
5 kg + 5 kg	
1 kg + 1 kg	

4. Accessories

Zhermack silicone rubbers can be supplied with the following accessories:

- Thixotropizing agents
- Retardants for extending the workability of addition silicone rubbers
- Concentrated colouring pigments
- Silicone oils



Technical Data

◆ Addition Silicone (Platinum Curing Agent)

Applications	Name	Color	Hardness (ShA)	WT (@ 23 °C)	ST (@ 23 °C)	Visc (cP)	Elongation at break (%)	Density (g/cc)	Tear B (N/mm)	Tensile Strength (N/mm ²)
Special Effects	ZA SFX 00-20	transparent	20 sh 00	25'	1 h 10'	5.200	770	0,95	3,5	1,20
	Silskin 10	translucent	10	7'	30'	4.500	600	1,08	11	3,5
	HT 24 WT 5 Transparent	translucent	24	5'	1 h 20'	4.500	540	1,09	14	5
	HT 33 Transparent	translucent	33	20'	3 h 30'	7.500	460	1,09	20	6
	ZA 35-15 GLASS	transparent	25	1 h 15'	8 h	200	-	0,98	-	-
Body casting	ZA 22 Thixo Body	●	22	10'	25'	thixo	360	1,14	14	2,5

◆ Alginate

Applications	Name	Texture	Color	ST (@ 23°C)	Packaging			
Body casting	AL PR	powder	●	2'3" - 3'	20 x 500 g bags	10 kg bag	20 kg bag	
Special effect	AL MT	powder	○	9' - 13'	20 x 500 g bags	10 kg bag	20 kg bag	

Mixing ratio: 2 parts of water, 1 part of powder in weight

Note: The temperature of the water affects the setting time of the alginate. The hotter, the faster it sets.

Accessories

Name	Color	Main features
Delayer	transparent	To increase the working and setting time
Silicone Oil 50 cPs	transparent	To adjust the flow of the base rubber
Thixo Agent Addition	transparent	To adjust the flow of the base rubber
Deadner SFX	transparent	To soften the base rubber without leaving the surface oily
Color pigments	● ● ● ● ● ● ● ●	



Please visit our website at
www.zhermack.com

Zhermack

Zhermack S.p.A.
Via Bovazecchino, 100
45021 Badia Polesine (RO) ITALY

T +39 0425 597611
F +39 0425 53596
info@zhermack.com
www.zhermack.com

