

1. Introduction

The LifeForm® range of materials are two component, addition curing RTV silicone materials specially designed for life-casting work.

The exceptional detail that can be replicated with LifeForm®, plus the release properties of the rubber from skin and the toughness of the cured material make LifeForm® a far superior option for life-casting when compared with alternative materials such as Alginates.

LifeForm FaceCoat® is a thinner version designed to give higher detail reproduction where required.

Key benefits of the LifeForm® range include:-

- 1:1 mixing ratio, easy to mix
- Releases from skin/hair exceptionally well; provides incredible detail on removal
- Quick curing at room temperature
- Cures to a tough, elastic rubber suited for use with a wide range of resins
- LifeForm® can be bonded to itself to allow the LifeCaster to apply multiple coats

2. Applications

LifeForm® materials are generally mixed by hand in quantities up to 5-10kgs, although it is possible to process through other means.

LifeForm® is designed to allow artists to take detail mouldings of the human form, although it has also been used to take replicas of a wide range of articles:-

- Delicate sculptures for replicating
- Ornate plaster work where physical damage would be unacceptable
- Engineered components - the low shrinkage of LifeForm® provides extremely close replication
- Forensic items

3. Typical Properties – Liquid Materials

Property	Units	LifeForm FaceCoat® Part A	LifeForm FaceCoat® Part B
Viscosity @25°C	cps	Thin, mobile paste	Thin, mobile paste
Specific Gravity @25°C	°Shore A	~1-1.1	~1-1.1
Appearance	-	Pale Yellow-Green	Pale Yellow-Green

4. Typical Properties – Cured

Property	Units	Minimum	Maximum
Tensile Strength	N/mm ²	1.2	1.4
Elongation	%	>280	
Colour	-	Pale Yellow-Green	
Hardness	Shore A	28-30	

Description

Addition-curing RTV silicone rubber specifically designed for life-casting work

Form

Two-part mobile paste

Mix Ratio

1:1 by weight
1:1 by volume

Typical Open Time

8-10 minutes

Typical Removal Time

12-15 minutes

5. Approximate Reactivity (dependant on ambient temperature)

Property	Typical Value	Units
Working time	8-10	Minutes
Removal time	12-15	Minutes
Curing time	1-2	Hours

6. Mix Ratios

	LifeForm® Part A	LifeForm® Part B
By Weight	1 parts	1 part
By Volume	1 parts	1 part

7. Instructions for use – Preparation for mixing

1. Select an appropriate mixing container:-
 - a. The container should be clean and dry and capable of holding twice the mix quantity.
 - b. Ideally should be Polyethylene – this will allow re-use.
2. Prepare the mixing equipment (whether mixing by hand or drill):-
 - a. Ensure spatulas or mixers are clean and dry and suitable for the quantity to be mixed.
 - b. If using a drill, ensure it is set to an appropriate and safe speed.

8. Instructions for use – Mixing

1. Weigh the LifeForm® Part A into the mixing container.
2. Weigh the corresponding quantity of LifeForm® Part B into the container.
3. Mix the material, moving the mixing equipment up and down and from side to side in the liquid.
4. After ~1 minute of mixing, apply the material to the surface to be coated; do not continue to apply past 7-8 minutes.

9. Curing

1. Allow a minimum of 10-15 minutes before attempting to remove.
2. Once removed, if possible, leave for 1-2 hours to allow the rubber to build strength before using.

10. How much LifeForm® should I use?

This is highly dependent on the substrate; please contact Mouldlife for further assistance.

11. Working safely with LifeForm® materials

All chemicals present certain hazards, and due care must be taken to ensure safe working practises are followed when using the materials. Failure to follow safe working practise can potentially result in injury.

Some sensible guidelines for working safely with LifeForm® materials include, but are not limited to the following.

- i) You must carry out an appropriate risk assessment for the process you are carrying out. Useful guidance can be found at www.hse.gov.uk/risk/index.
- ii) You must read and understand the MSDS for the materials, ensuring that you follow the guidelines as indicated.

If in doubt, contact your Mouldlife representative who can put you in touch with experts who can assist.

12. Packaging, Storage and Shelf-life

LifeForm® is available in a range of kit sizes:- 2kg, 5kg and 50kg. Larger sizes can be provided upon request.

LifeForm® should be stored between 18°C and 25°C. Under these conditions, shelf-life in the original, unopened containers is six months.