This material is a quick setting compound supplied in powder form that is then mixed with water. This produces a very flexible mould giving excellent reproduction.

Because of its quick setting time and ability to be used directly onto skin it is usually used to reproduce 'body parts', although it can be used to mould other items. Moulds made with this material will deteriorate rapidly, making it only possible to produce one or two copies, dependant on complexity. Wrapping in a damp cloth will help prolong its usage. If left uncovered the mould will dry out and shrink.

As the compound is mixed with water and is damp, plaster is a good option to make your copy. You can use resin but you must dab dry the mould surface and even then the detail is not as good as plasters, it will almost certainly be 'sticky' although it should dry out in a warm room overnight.

Preparation:
The setting time of Alginate is 3 min 40 secs to 4 min 10 secs at 23°C so make sure you are fully prepared before mixing, ratios are given on the labels. The material is very flexible but not very strong so a support case is recommended. If possible this is best done in situ to avoid distortion, use either plaster or plaster bandage which is applied to the back of the Alginate as soon as it sets.

Mixing:
Mix Alginate thoroughly and quickly, mechanical means can be used if required but avoid introducing air bubbles if possible.
Mixing ratio by volume: Pouring consistency 2 parts water / 1 part Alginate
Brushable consistency 1 part water / 1 part Alginate

Application:
We recommend you rub in petroleum jelly when moulding from skin. When moulding directly from a face adequate allowances must be made to breath, this is usually done by placing two straws in the nostrils. Apply the Alginate to the body trying to avoid air bubbles and leave to set. Mix plaster and apply to back of Alginate whilst still in situ and leave to set, this will vary dependent on plaster. Remove plaster as soon as it sets and peel off Alginate, this is then laid back into the plaster support. The mould is then ready to cast your copy. As stated previously, wrapping the mould in a damp cloth will prolong its life.

Hands or other objects can be copied by simply pushing into the mixed material, the container will act as a support. When set gently ease your hand out of the material.

Coverage:
As an approximate guide to coverage, 100gm of alginate mixed one to one with water by volume will cover an area of 100 cm² (16 in²) to a depth of 2cm (¾”).