



Special investment compound for casting Titanium alloys

Advantages of GILVEST Titan T

- Without alpha-case
- Optimum consistency
- Smooth surface with maximum reproduction of details
- Consistent high quality

Mixing ratio:

Vacuum mixing:

1 kg of powder : 180 - 190 ml of distilled water

Conventional mixing:

1 kg of powder : 190 - 200 ml of distilled water

△ mixing volume:	0.43 – 0.45 l
Density:	2.74 – 2.67 kg/l
Mixing time:	approx. 1-2 min.
Processing time:	approx. 6 min.
Solidification end:	approx. 20 min.
Curing time before wax melting:	At least 120 min. better 180 min.
Heating rate:	4 °C/min.
End temperature:	800 – 820 °C
Dwell time at end temperature:	90 min.
Cooling rate	4 °C/min.
Casting temperature:	250 – 400 °C

Directions for use

The temperature of both the **GILVEST Titan T** and the water to be mixed with should be 20° - 23° C. If the temperature is lower, the setting time may be unduly prolonged. The setting time can be reduced by the use of water whose temperature is above 25° C and not more than about 30° C.

The weight of powder required for a particular volume of investment can be calculated by the a.m. density.

The necessary quantity of water is placed in the mixer and the chosen quantity of **GILVEST Titan T** is added and mixed in. It is advantageous, but not essential, to use an automatic vacuum mixing and pouring machine. If mixing is carried out by hand, particular care should be taken to mix the powder and water thoroughly to obtain a homogenous mixture.

The investment material prepared in this way is poured into the flask in which the previously prepared wax patterns have been positioned. The mix can be compacted by gentle vibration, and, if at all possible, pouring should be carried out under vacuum.

If the flasks are not filled under vacuum, the material should be poured carefully down the sides, so that the wax patterns are gradually covered from below. In any case subsequent application of vacuum is recommended, in order to remove any air bubbles clinging to the patterns.

GILVEST Titan T



Synthesegips
Service

Allow the filled flasks to stand for 120 min., preferable 180 min before preheating. They may then be placed in the cold oven.

The preheating period depends on the size and number of flasks. The heating rate may vary between 3° - 5° C/min. The end temperature should be hold for at least 90 minutes before cooling down to casting temperature.

When the alloy is poured, the manufacturer's directions should be observed.

When the flasks have cooled to room temperature, the castings can be removed by methods suitable for the alloy in question.

Surfaces can be cleaned with glass beads

Special note

Do not mix **GILVEST Titan T** with other products.

Storage life

GILVEST Titan T can be stored for at least one year in closed moisture-tight containers.

If **GILVEST Titan T** has been stored at temperatures differing considerably from that at which it is to be used, the required quantity should be conditioned for several hours at a temperature of 20° - 23° C before mixing.

Prolonged storage at temperatures greater than 30° C shortens the useful life of **GILVEST Titan T**.

Packaging

Paper bags, plastic lined

25 kg

The recommendations are given to the best of our knowledge after careful control. We guarantee the quality of our products. Any further liability cannot be accepted since the proper application of our products is outside of our control.