

# PVA-Borax Gel

## Preparation of PVA-Borax Gel

### Ingredients (for 250 ml):

16 g	Polyvinyl Alcohol (PVA) 4-98 (Art. No. 2516010)
4 g	Borax (Art. No. 2412010)
250 ml	Aqua Destillata (distilled water)

### Equipment:

- 1 Large beaker, min. 300 ml, to dissolve the PVA (Art. No. 1879040, -060 or -080)
- 1 Small beaker, min. 50 ml, to dissolve the Borax
- 1 Cooking pot, large enough for the large beaker
- 1 Thermometer, measuring up to 100 °C (Art. No. 5931100)
- 1 Metall stirrer for mixing
- 1 Magnetic stirrer, preferably with heat (Art. No. 5763010 or 5763020)
- 1 Cooking plate (unnecessary if a magnetic stirrer with heat is available, Art. No. 5788350)

### Process:

#### Step 1:

Mix PVA with 200 ml Aqua Destillata in the large beaker. Let soak for at least one hour. Dissolve the Borax in 50 ml Aqua Destillata. The process goes faster if the water is warm.

#### Step 2:

Place the large beaker in a water bath in the cooking pot or place the beaker directly on the magnetic stirrer. Dissolve the PVA by heating the soaked granulates to 80 °C. Keep stirring, so the granulates do not settle at the bottom of the beaker. Check the temperature. The PVA will not dissolve until the temperature reaches 80 °C. At the end the PVA solution is almost completely translucent. Remove it from the heat when no granulates are visible in the solution anymore. Let cool down to 70 °C.

#### Step 3:

Stir the PVA solution vigorously and add the dissolved borax salt. A gel is immediately formed. Let cool down before use.

Please note: Do not leave on an object as a compress. The gel will stick to paper, wood and other objects containing cellulose if left for over 5 sec.