

Product Information

NXT-110 (Mold Release Agent)

The surface of a silicon-derived ceramic mold will be passivated with a monolayer of release agent after being treated in the way described below. We strongly recommend the treatment procedure is carried out in a nitrogen environment (such as inside a glove box), in order to avoid degradation of the release agent. The cleanliness of the mold surface is crucial to the quality and durability of the releasing layer.

Preparation

- NXT-110-A 1g
- NXT-110-B 500 ml

Mold cleaning

- Soak in $\text{NH}_4\text{OH}:\text{H}_2\text{O}_2:\text{H}_2\text{O}$ (1:1:5) at 70-80°C for 15 minutes;
- DI water rinse for 5 minutes;
- Blow to dry using a nitrogen gun.

Mold treatment

- Add 1g NXT-110-A to 250 ml NXT-110-B;
- Dip a mold to the mixture for 2 minutes in nitrogen environment (or 1 minute in atmosphere);
- Take the mold out of the mixture and dip it to fresh NXT-110-B for 5 minutes;
- Take the mold out and blow it to dry using a nitrogen gun;
- Bake the mold in a (vacuum) oven at 80°C for 30 minutes.

Mold retreatment

If a mold needs to be treated again,

- Remove old passivation layer on the mold using oxygen plasma;
- Clean the mold (see *Mold cleaning*);
- Treat the mold (see *Mold treatment*).