the mixture is lower than the TODT of the BCP alone. Faster assembly kinetics on the ordered films obtained using these mixtures are noted compared with the ordered films obtained with a block copolymer alone.

Summary:

In an aspect, there is provided a process for reducing the assembly time of an ordered film of block copolymer, said ordered film comprising a mixture of at least one block copolymer having an order-disorder transition temperature (TODT) and at least one Tg with at least one compound not having a TODT, this mixture having a TODT below the TODT of the block copolymer alone, the process comprising the following steps:

- mixing at least one block copolymer having a TODT and at least one compound not having a TODT, in a solvent,

- depositing this mixture on a surface,

- curing the mixture deposited on the surface at a temperature between the highest Tg of the block copolymer and the TODT of the mixture.

In another aspect, there is provided the use of the process as defined above, for generating lithography masks or ordered films.

In another aspect, there is provided a lithography mask or ordered film obtained as defined above.

Detailed description:

As regards the block copolymer(s) having an order-disorder transition temperature, any block copolymer, regardless of its associated morphology, may be used in the context of the invention, whether it is a diblock, linear or star triblock or linear, comb or star multiblock copolymer.