**Polydimethylsiloxane**

Monomers for the condensation polymerization:

**Color key:**
yellow = silicon
black = carbon
white = hydrogen
red = oxygen
green = chlorine

![Image of Lego blocks representing monomers](image)

**water**

This model requires:
1 red 2x2 brick
2 white 1x1 bricks

**dichlorodimethylsilane**

This model requires:
2 green 2x2 bricks
1 yellow 2x2 brick
2 black 2X2 bricks
6 white 1x1 bricks

**Top view**

![Top view of Lego model](image)

**Side view**

![Side view of Lego model](image)
Polydimethylsiloxane crosslinking via a hydrosilation reaction

The large yellow silicon atoms can be made by placing a 1x3 brick and a 2x3 brick over 1x3 brick and another 2x3 brick.

Before crosslinking, oligomers contain vinyl groups and silane groups. (Note the chains are shown in opposite orientations.)

A hydrosilation reaction crosslinks the oligomers together.