

9.5. Exposure scenario 5: Service life (professional worker) - Handling of silicone articles in professional settings

Environment contributing scenario(s):		
CS 1	Handling of silicone articles in professional settings	ERC 10a , ERC 11a
Worker contributing scenario(s):		
CS 2	Handling and low energy manipulation of massive object	PROC 21

Exposure scenario(s) of the uses leading to the inclusion of the substance into the article(s):

ES3: Use at industrial sites - Use of Karstedt concentrate in silicone polymer, silicone elastomer and silicone article production

ES4: Widespread use by professional workers - Use of silicone in professional settings

Further description of the use:

Silicone rubbers are produced based on silicone fluids by cross-linking the linear PDMS molecules. The processes used are called high-temperature vulcanization (HTV) and room temperature vulcanization (RTV). During the room temperature vulcanization, silicone rubbers are synthesized by cross-linking linear silicones containing functional groups (e.g. vinyl or hydroxyl) in the presence of catalysts (e.g. platinum based) and suitable reagents.

Karstedt concentrate in the final application is < 0.03%. This is below the cut-off values given in article 14, paragraph 2 of the REACH regulation:

- "A chemical safety assessment in accordance with paragraph 1 need not be performed for a substance which is present in a mixture if the concentration of the substance in the mixture is less than:
- (a) the cut-off value referred to in Article 11, paragraph 3 of Regulation (EC) No 1272/2008;
- (b) 0,1 % weight by weight (w/w), if the substance meets the criteria in Annex XIII to this Regulation." As a consequence, a chemical safety assessment for the given professional use is not required.