

HH-26.1. Occupational scenario for professional application of adhesive

Systematic title based on use descriptor	PROCs	
	10	Roller application or brushing.
	11	Non-industrial spraying.
	13	Treatment of articles by dipping and pouring.

HH-26.2 Controlling worker exposure

Product characteristics	Adhesives may contain up to 1.5% boron.	
Amounts used	Several kg boron per day.	
Frequency and duration of use	Several times per day for a few minutes, in total up to two hours per day.	
Human factors not influenced by risk management	None	
Other given operational conditions affecting workers exposure	Activities take place indoors.	
Technical conditions and measures at process level (source) to prevent release	The adhesive is applied as a liquid or a paste.	
Technical conditions and measures to control dispersion from source towards the worker	None	
Organisational measures to prevent /limit releases, dispersion and exposure	Appropriate training.	
Conditions and measures related to personal protection, hygiene and health evaluation	Clothing	Standard work clothes
	Gloves	Not required for normal industrial exposure
	Eye protection	Required where good hygiene practice or substance classification demands it
	RPE	-

HH-26.3. Exposure estimation

	INHALATION						
		Activity	Source/ Parameters	RMM	Value 8h TWA mg B/m ³	RCR DNEL = 1.45 mg B/m ³	
	Human Health Exposure Estimations	Modelled (ART)	Spraying of adhesive	120 minutes duration Powders dissolved in a liquid matrix 1-5% boron, Medium viscosity Surface spraying of liquids Low application rate Spraying only horizontally or downwards No or low compressed air Open process with effective housekeeping No LEV No secondary controls	-	0.041 (90P)	0.028
DERMAL							
		Activity	Source/ Parameters	RMM	Value mg B/day	RCR DNEL = 4800 mg B/day	
Modelled (MEASE)		Spraying of adhesive	Physical form	aqueous solution	-	0.288	<0.001
			Content	1 - 5% boron			
			PROC	11			
			Duration	60 - 240 min			
	Use pattern		non dispersive				
		Handling	direct				
		Contact level	incidental				

HH-26.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

If the parameters used in the MEASE model outlined above do not reflect conditions at the DU facility, the DU can use MEASE and input the parameters that do reflect conditions at the DU facility to check whether the DU works inside the boundaries set by the ES. Detailed guidance for evaluation of ES can be acquired via your supplier or from the ECHA website (guidance R14, R16).