HH-16.1. Occupational scenario for closed production at ambient temperatures

	PROCs	
Systematic title based on use descriptor	1	Use in closed process, no likelihood of exposure.
	2	Use in closed, continuous process with occasional controlled exposure.
	3	Use in closed batch process (synthesis or formulation).

HH-16.2 Controlling worker exposure

Product characteristics		Granular or powder form.
Amounts used		Up to a tonne per shift.
Frequency and duration of use		Daily
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		Most transfer of substances and production processes are closed including opening and addition of borates.
Technical conditions and measures to control dispersion from source towards the worker		Where there are breaches in the closed systems LEV is used to control exposure.
Organisational measures to prevent /limit releases, dispersion and exposure		Appropriate training. Regular testing and maintenance of plant and equipment.
Conditions and measures related to personal protection, hygiene and health evaluation	**Clothing**	Standard work clothes.
	Gloves	Not required for normal industrial exposure.
	Eye protection	Safety glasses or goggles.
	RPE	P2/P3 required where exposure is above the DNEL

HH-16.3. Exposure estimation

Human Health Exposure Estimations

INHALATION

	Activity	**Source/ Parameters**	**RMM**	**Value** 8h TWA mg B/m^3	**RCR** DNEL = 1.45 mg B/m3
Measured	General production activities including cleaning	90P of measured data (45 datapoints)	RPE not taken into account	0.08	0.06

DERMAL

	Activity	**Source/ Parameters**		**RMM**	**Value** mg B/day	**RCR** DNEL = 4800 mg B/day
Measured	Dermal contact unlikely	-	-	-	-	-
Modelled (MEASE)	Routine cleaning	**Physical form**	high dustiness	-	0.048	<0.001
		Content	> 25% boron			
		PROC	2			
		Duration	15 – 60 min			
		Use pattern	closed system			
		Handling	direct			
		Contact level	incidental			

HH-16.4. 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).