

E-10.1 Environmental scenario for industrial use of borates for autocausticizing

Systematic title based on use descriptor	ERCs	Description
	4	Industrial use of processing aids

E-10.2 Controlling environmental exposure

Product characteristics	Granular, powder or dissolved form	
Amounts used	0.3 T B/day	
Frequency and duration of use	Not relevant	
Environment factors not influenced by risk management	Dilution of 10	
Other given operational conditions affecting environmental exposure	A daily make up is necessary because of the loss of borates to the environment.	
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil	Release factor to water after on-site treatment	ca. 500 000 g/T
	Release factor to air after on-site treatment	36 562 g/T
Organizational measures to prevent/limit release from site	Spillages of powder or granulated borates should be swept or vacuumed up immediately and placed in containers for disposal in order to prevent unintentional release to the environment.	
Conditions and measures related to municipal sewage treatment plant	Not relevant; direct discharge	
Conditions and measures related to external treatment of waste for disposal	Where appropriate material should be recovered and recycled through the process. Waste containing borates should be handled as hazardous waste.	

E-10.3. Exposure estimation

ES1: Environmental Exposure Estimations		PEC	PNEC _{add}	RCR
	Aquatic environment	457 µg/L	2 020 µg/L	0.226
	Terrestrial environment	No quantitative assessment	5.4 mg/kg dw	< 1

E-10.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

The DU works inside the boundaries set by the ES if either the proposed risk management measures or emissions (expressed in g/T) as described above are met or the DU can demonstrate on his own that his implemented risk management measures or emissions are adequate. Detailed guidance for evaluation of ES can be acquired via your supplier or from the ECHA website (guidance R16). For environmental exposure, a DU-scaling tool (free download: <http://www.arche-consulting.be/Metal-CSA-toolbox/du-scaling-tool>) is available.