

E-22.1 Environmental scenario for generic use of borates in laboratories as analytical reagent

Systematic title based on use descriptor	ERCs	Description
	6b	Industrial use of reactive processing aids
	8a	Wide dispersive indoor use of processing aids
	8b	Wide dispersive indoor use of reactive substances
	8d	Wide dispersive outdoor use of processing aids
	8e	Wide dispersive outdoor use of reactive substances

E-22.2 Controlling environmental exposure

Product characteristics	Granular, powder or dissolved form
Amounts used	Small quantities
Frequency and duration of use	Borates can be used every working day.
Environment factors not influenced by risk management	Not relevant, professional labs have strict conditions for water discharge
Other given operational conditions affecting environmental exposure	Small quantities are used so no relevant exposure is expected. Professional labs have strict conditions for water discharges or do not discharge their wastewater to a sewer or river. Wastewater can also be collected on site and sent to an external treatment facility.
Organizational measures to prevent/limit release from site	The staff should know which solutions they are allowed to pour down the drain and which not.
Conditions and measures related to municipal sewage treatment plant	Not relevant, boron is not removed from water in municipal STP. If sites discharge to a municipal STP the concentration of boron should not exceed 10 mg/L in the municipal STP.
Conditions and measures related to external treatment of waste for disposal	Waste containing borates should be handled as hazardous waste.

E-22.3. Exposure estimation

ES1: Environmental Exposure Estimations	If only small quantities are used or strictly controlled discharges for larger discharges are respected, safe use is expected.
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E-22.4. 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.