Endocrine Disruptors for the Environment (ED ENV)

Substance Classification

Substance alters a function of the endocrine system, resulting in a change in morphology, physiology, growth, development, reproduction or lifespan of an organism/system/population causing impairment.

There should be a biologically plausible link (correlation) between the endocrine activity and the adverse effect in the organism, its offspring or future generations.

A substance must meet all three criteria for classification with evidence for the endocrine disruption, the adverse effect and the plausible link.

Adverse effects that are solely the result of other direct toxicity (already classified) shall not be considered for this hazard class.

Category	Criteria		
Category 1	Known or Presumed		
	Predominantly animal based evidence of		
	(a) Endocrine activity <i>and</i>		
	(b) An adverse effect <i>and</i>		
	(c) A biologically plausible link between (a) and (b)		
Category 2	Suspected		
	Predominantly animal based evidence of		
	(a) Endocrine activity and adverse effect and		
	(b) Biologically plausible link <i>and</i>		
	(c) Does not meet the criteria for Category 1		

Eg: Ammonium Perchlorate (CAS# 7790-98-9) → ENDOCRINE DISRUPTOR FOR ENVIRONMENT

Endocrine Activity → Inhibits iodide uptake

 $\textbf{Adverse Effect} \rightarrow \textbf{Altered sex ratios, Hermaphroditism, Reduced stress tolerance}$

Plausible Link \rightarrow Inhibited iodide uptake causes reduced thyroid hormone production. Results in severe adverse effects on behaviour and development. Not relevant for humans.

Classification	Category 1	Category 2
Pictogram	-	-
Signal Word	Danger	Warning
Hazard Statement	EUH430 - May cause endocrine disruption in the environment	EUH431 - Suspected of causing endocrine disruption in the environment
Precautionary Statement Prevention	P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood. P273 - Avoid release to the environment.	P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood. P273 - Avoid release to the environment.
P - Statement Response	P391 - Collect spillage.	P391 - Collect spillage.
P - Statement Storage	P405 - Store locked up	P405 - Store locked up
P - Statement Disposal	P501 - Dispose of contents/container to	P501 - Dispose of contents/container to

*Precedence applies, EUH431 should not appear where EUH430 applies

Mixture Classification

		nits Triggering the of a Mixture as:
Product CLP Class Component	ED ENV 1	ED ENV 2
ED ENV 1	C ≥ 0.1 %	-
ED ENV 2	-	C ≥ 1 %

*EUH210 applies for non-hazardous mixtures containing => 0.1% of ED ENV 2 substance

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