



Environmental hazards

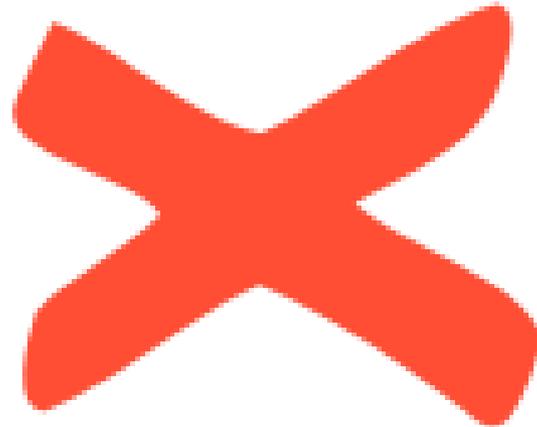
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Disinfectants and the environment

- Disinfectants are not like all other chemicals - their primary goal is to kill (biocidal products)
- EU Ecolabel as well as the Nordic Swan excludes disinfectants in their criteria for all-purpose cleaners.



Some good criteria from ecolabelling

- Disinfectants end up in sewage treatment plants and waterways just as detergents
- Disinfectants need to do their work without harming the environment
- Relevant general criteria
 - Ecotoxicity for aquatic organisms (fish, daphnia, algae)
 - Ready biodegradability in an aerobic aqueous medium
 - Bioaccumulation
 - Anaerobic biodegradation
- Also specific criteria are needed

Some hazardous examples

- Quaternary ammonium compounds
- Same structure as many cationic surfactants
- Found in the environment in fish tissue and in sludge (TemaNord 2014:556)

- Triclosan
- Nano silver and silver compounds

- Fragrances can also be hazardous to the environment, not to forget that many people are sensitized



General advice on safe use of chemicals

- Identify the problem
- Can the problem be solved without chemicals?
- Choose simple solutions
- If exceptional cases, documentation of why a more hazardous solution is chosen
- Risk assessment (occupational health & environment)
- Controlled use
- Hazardous waste handling

- Thanks for listening!