



What type of information is needed to identify alternatives?

ISTAS/ETUC
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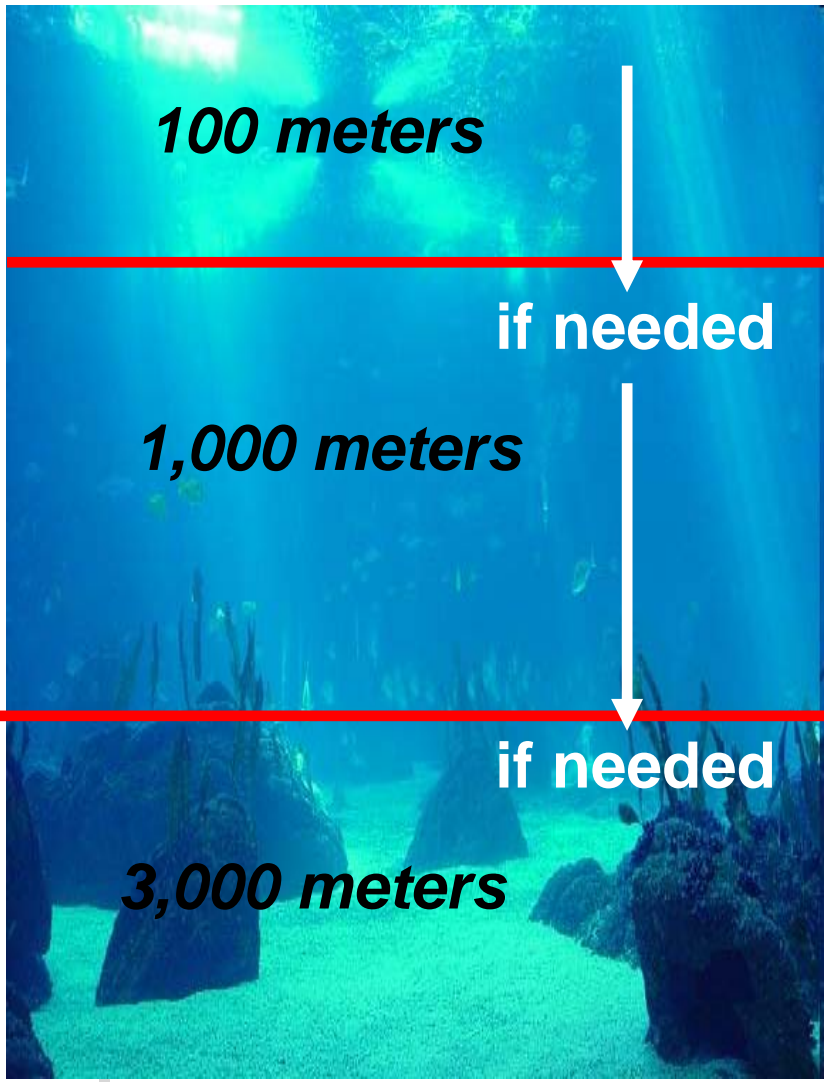
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1. Substitutions steps
2. Broad information on uses
 - Use service
 - Performance level
 - Functional use & functional requirements
3. Some real examples
4. Aim of the public consultation?
5. Information needed for an effective public consultation?
6. Why is that information needed?
7. Conclusions



1. Examine the purpose of the activity were the substance is used:
 - What is the activity? What tasks are performed? Why it is done this way?
 - What potential adverse effects occur in production? What are the benefits?
 - What this substance used for?
How does it work?
2. Identify possible alternatives.
 - Why to use this substance? How does it work?
 - Can I do it differently? What may happen?
 - Could other methods or tools been used? What may happen?
 - Can I use another substance? What may happen?
3. Compare the alternatives
4. Selection of alternatives





Use Service
(end-use + service life + life cycle)

Material substitution

if needed

Performance level
(process, production, applicable use, volumetric use)

Process substitution

if needed

Functional use
(use function)

Substance substitution





1. Function: Stripper in cleaner of welding fumes of stainless steel material

Alternative substances:

- Fatty acid esters
- Acidic aqueous solutions (mineral acids -sulfuric, phosphoric, nitric- or organic -acetic acid or oxalic acid-)

2. Process: Cleaning of welding fumes generated by welding of stainless steel parts

Alternative cleaning processes

- Grinding or polishing
- Sand blasting
- CO₂ abrasion balls



Alternative welding processes

- Inert gas welding (Tungsten Inert Gas or Metal Inert Gas)
- 3. Use service: production of air conditioners, they must be clean for selling, dirt produced during linkage of stainless steel parts**

Alternative linkage:

Folding aluminium plates





LEVEL OF INFO	ALTERNATIVES	HAZARDS
Function	Fatty acid esters	Non toxic
Process	Acidic aqueous solutions	Corrosive, possible neurotoxicant, possible respiratory, skin and sensory organs toxic, possible harmful to aquatic life, can contribute to the eutrophication of surface waters.
	Sand blasting	Noise, dust, vibrations
	CO2 abrasion balls	Noise, vibrations
	Inert gas welding	electrical contact, heat contact, inhalation of emissions
Service	Folding aluminium plates	None

Bis(2-ethylhexyl)phthalate (DEHP) Alternatives Associated with Resilient Flooring



Alternative chemicals:

DINP, DBP, DEHT, BBP, DIDP, DIHP, DHP, BOP (phthalates)	DEHA (di(ethylhexyl) adipate)
97A (hexanadedioic acid, di-C7-9-branched and linear alkyl esters)	TXIB (butane ester 2,2,4-trimethyl 1,3-pentenediol di isobutyrate)
DBS (dibutyl sebacate)	DGD, DEGDB, TEGDB (dialkylene glycol dibenzoates)
DEHPA, TCP (phosphates)	ATBC (o-acetyl tributyl citrate)

Alternative materials: Bamboo, natural linoleum, cork, polyolefin, polyethylene/limestone blend, rubber, concrete, terrazo, concrete and recycled glass blend and wood



- Case study 3: Performance level



- database for parts cleaning, metal surface cleaning, component cleaning and degreasing, based on real processes in numerous European companies.

- Case study 4: Functional use

CLEANGREDIENTS®



- online resource for green formulation®
- CleanGredients includes listings for surfactants, solvents, fragrances, and chelating agents.



- 3000 meters: Functional use & functional requirements
- 1000 meters: Performance level
 - Applicative use (sector/s of use, process/s, duration of use/exposure)
 - Operational parameters (pH, temperature, etc.)
 - Volumetric use (quantities)
 - Equipments
- 100 meters: Use service
 - End use + service life (what is the substance needed for?)
 - Map of uses throughout life-cycle stages
 - Environment release, product/s and article/s categories



- Allow third parties to provide comments and information about alternative substances or/and technologies to the substance for which authorisation is sought or reviewed
- Help RAC/SEAC in drafting specific aspects of their opinion:
 - Existence of possible alternatives ? If, yes:
 - RAC: risks from use of alternatives correctly estimated by the applicant in his analysis of alternatives?
 - SEAC: suitability and availability of alternatives correctly assessed by the applicant? Economic and technical feasibility for the applicant? Has the applicant considered all available alternatives?



For each use applied for:

- Substance information
- Use service: Full exposure scenario covering the specific use as provided in the application
 - Operational conditions
 - Risk Management Measures
- Description of uses with Use Descriptor System
- Precise function of the substance
- Analysis of alternatives as provided in the application

Info needed for alternatives identification	Info needed for effective public consultation	Where is the information available ?
<p>Substance information</p> <p>General properties: name, phys-chem properties</p> <p>C&L</p> <p>Eco-Tox data</p>	<p>Substance information</p> <p>General properties: name, phys-chem properties</p> <p>C&L</p> <p>Eco-Tox data</p>	<p>Annex XV</p> <p>Annex XIV</p> <p>ECHA's website</p>
<p>Use service</p> <p>What's the substance needed for?</p> <p>Map of uses throughout life-cycle stages</p>	<p>Description of uses with Use Description System</p> <p>Operational Conditions + Risk Management Measures</p>	<p>ES documented in CSR</p> <p>ES documented in eSDS</p> <p>Application for authorisation</p>
<p>Performance level</p> <p>Applicative use, operational parameters (pH, T°), volumetric uses (quantities), equipments</p>	<p>Operational Conditions + Risk Management Measures</p>	<p>ES documented in CSR</p> <p>ES documented in eSDS</p> <p>Application for authorisation</p>
<p>Functional use</p>	<p>Precise function of the substance</p>	<p>Application for authorisation</p>
<p>Analysis of Alternatives</p>	<p>Analysis of Alternatives</p>	<p>Application for authorisation</p>



- Full exposure scenario covering the specific use as provided in the application:
 - **Operational conditions**
 - enable third parties to understand better whether their alternatives are economically and technically feasible for the applicant
 - **Risk Management Measures**
 - enable third parties to understand whether their possible alternatives are suitable (= with lower risk to health and/or the environment)
 - enable third parties to suggest conditions in case the authorisation is granted



- Description of uses with Use Descriptor System:
 - General information
 - If not known, possible alternative technologies cannot be proposed by third parties
- Precise function of the substance:
 - complement the general description
 - enable third parties to judge the suitability of their alternatives
 - Key to identify alternative substances with equivalent function



- Analysis of alternatives as provided in the application:
 - Enable third parties to better focus their submissions
 - with alternatives not known to the applicant
 - with missing info on alternatives identified by the applicant (price, quantities and qualities available, etc.)
 - with a Socio-Economic Analysis to support possible alternatives
 - Facilitate ECHA and rapporteurs' tasks
 - optimize time available (opinion within 10 months!)
 - reduce analysis of inappropriate submissions
 - reduce the need to request additional information from third parties



- Third parties' submissions depend heavily on the information provided on ECHA's website
- The more comprehensive the public info on uses applied for, the higher the chance to collect useful info on alternative substances and/or technologies
- In Art 64(2), Broad information on uses = Holistic perspective
- On top of description with UDS, the precise function of the substance, the full ES & the Analysis of Alternatives (as provided in the application) should be provided by ECHA as a minimum.



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