



Alfa Laval Restricted Substance List

Formerly known as the Alfa Laval Group's Black and Grey List

Introduction:

The Alfa Laval Restricted Substance List (AL RSL) provides information about restrictions on the presence of substances in Alfa Laval Groups processes and products (materials, components and parts of our products) as well as packaging. The list comprises of legislations and global agreement deemed relevant for our products and area of business. Any presence of substances regulated in the listed legislations must be reported to Alfa Laval for further evaluation. The list does not cover specific national legislations.

The Alfa Laval Restricted Substance List supersede Alfa Laval Group Black and Grey List.

The AL RSL list is divided into three different categories:

- **Banned** substances are substances which are prohibited.¹
- **Restricted** substances are prohibited in certain applications relevant to the Alfa Laval Group. A restricted substance may be used if the application is unmistakably outside the scope of the legislation in question.
- **Substances of Concern (SoC)** are substances where presence must be evaluated and monitored. This includes substances currently being evaluated for regulations applicable to the Banned or Restricted categories, or substances with legal requirements for reporting and/or monitoring. Responsible product owners must be aware of the associated legal notification requirements and the risks with continued use of a Substance of Concern. They must also ensure legal compliance to these requirements.

1. Prohibited to use, or put on the market, regardless of application. Thresholds might apply.

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The legislative list:

Banned

- EU Directive 2013/59/Euratom on ionizing radiation
- EU Regulation 1005/2009/EC on substances that deplete the ozone layer
- EU Regulation 2019/1021/EC on persistent organic pollutants Annex I, POP
- EU Regulation 1907/2006/EC REACH Annex XIV
- EU Regulation 1907/2006/EC REACH Annex XVII, entries 1, 6, 24-26, 45.

Restricted

- EU Regulation 517/2014/EC on fluorinated greenhouse gases
- EU Regulation 2019/1021/EC on persistent organic pollutants Annex II, POP
- EU Regulation 649/2012/EC concerning the import and export of hazardous chemicals, PIC
- EU Regulation 1907/2006/EC REACH Annex XVII, entries 2, 4, 5, 7, 8, 12-21, 23, 31-38, 41, 43, 46, 47, 49, 50, 58, 59-62, 64, 68, 70-71, 74, 76
- EU Directive 2011/65/EU RoHS 2
- EU Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators
- EU Directive 94/62/EC on packaging and packaging waste
- MEPC 269(68)
- EU Regulation 1257/2013/EC on ship recycling
- EU 2017/852 Regulation on mercury
- US Toxic Substances Control Act Section 6(h): Regulation of Persistent, Bioaccumulative, and Toxic Chemicals Under TSCA Section 6(h)

Substances of Concern

- Stockholm Convention: Proposed POP Candidates
- US Dodd-Frank Wall Street Reform and Consumer Protection Act, Section 1502
- REACH: Current recommendations for inclusion in the Authorisation List
- REACH: Candidate List of Substances of Very High Concern for Authorisation
- REACH: Proposals to identify Substances of Very High Concern (submitted)
- REACH: Submitted restrictions under consideration (if proposed restriction is applicable to Banned or Restricted categories)
- EU Regulation 2021/821 Dual Use (recast)

For detailed information on the specific substances in the above regulations, please request/see the associated supporting document "AL RSL – individual substances" (document number CRC-22-002).

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Changes from previous revision of RSL

The 1.1 revision is a minor update to include the new substances on the REACH Candidate List (SVHC).

This minor revision also includes the addition of the proposed restriction on *per- and polyfluoroalkyl substances* (PFAS) as an entire group of substances (EU Regulation 1907/2006/EC REACH Annex XVII).

Updated information on substances and restrictions:

- *REACH - Candidate List of Substances of Very High Concern for Authorisation (SVHC)*
 - Two new individual substance have updated information on RSL rev.1.1 due to identified as new SVHCs ([link](#)),
 - *Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (CAS No 75980-60-8*
 - *Bis(4-chlorophenyl) sulphone (CAS No 80-07-9)*

- *REACH – Submitted restrictions under consideration*
 - There is a new addition of the definition of the per- and polyfluoroalkyl substances (PFAS) group due to the submitted restriction under consideration for REACH Restriction (*Annex XVII*)
 - *Any substance that contains at least one fully fluorinated methyl (CF₃-) or methylene (-CF₂-) carbon atom (without any H/Cl/Br/I attached to it). A substance that only contains the following structural elements is excluded from the scope of the proposed restriction: CF₃-X or X-CF₂-X', where X = -OR or -NRR' and X' = methyl (-CH₃), methylene (-CH₂-), an aromatic group, a carbonyl group (-C(O)-), -OR'', -SR'' or -NR''R'''; and where R/R'/R''/R''' is a hydrogen (-H), methyl (-CH₃), methylene (-CH₂-), an aromatic group or a carbonyl group (-C(O)-).*