Date: 2024-02-28



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/local 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.

Alfa Laval Restricted Substance List

The legislative list

Banned

- EU Directive 2013/59/Euratom on ionizing radiation
- EU Regulation 1005/2009/EC on substances that deplete the ozone layer
- Stockholm Convention: Substances listed in Annex A: Elimination
- 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
- Stockholm Convention: Substances listed in Annex B: Restriction
- 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, 59-64, 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 379(80)
- 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 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 rev 2.0).

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Changes from previous revision of RSL

This revision is the annual major update of RSL to include new substances and restrictions. A summary of major changes is given below.

The legislative list, additions:

- Stockholm Convention: Substances listed in Annex A (Banned)
 - Align with existing EU Regulation 2019/1021/EC on persistent organic pollutants Annex I, POP
- Stockholm Convention: Substances listed in Annex B (Restricted)
 - Align with existing EU Regulation 2019/1021/EC on persistent organic pollutants Annex II, POP
- New entry For EU Regulation 1907/2006/EC REACH Annex XVII
 - Entry 63

Applicable updates to all the listed regulations have been included in the "AL RSL – individual substances" (document number CRC-22-002).

Updated information on substances and restrictions

Banned substances:

EU Regulation 2019/1021/EC on persistent organic pollutants Annex I, POP:

 Perfluorohexanesulfonic acid (PFHxS), its salts and related compounds have been added to the regulation. "Related compounds" are substances that contains the chemical moiety C₆H₁₃S- as one of its structural elements and that degrades to PFHxS. This group includes approximately 200 substances.

Stockholm Convention. Substances listed in Annex A:

 Three substances have been added to Annex A: Methoxychlor, Dechloranes and UV-328.

Restricted substances:

EU Regulation 649/2012/EC concerning the import and export of hazardous chemicals. PIC:

• The list has been updated with 35 new substances.

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EU Regulation 1907/2006/EC REACH Annex XVII:

• There is a new restriction for lead and lead compounds in PVC (0,1 % by weight of the PVC material). The restriction applies from 29 November 2024. For derogations, see <u>Restriction 63</u>

Substances of concern:

REACH Candidate List of Substances of Very High Concern for Authorisation (SVHC) Link: All news - ECHA (europa.eu).

- There are five new substances on the Candidate List:
- Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol (EC No 700-960-7)
- Bumetrizole (UV-326) (CAS No 3896-11-5)
- 2-(Dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one (CAS No 119344-86-4)
- 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329) (CAS No 3147-75-9)
- 2,4,6-tri-tert-butylphenol (CAS No 732-26-3)

Stockholm Convention: Proposed POP Candidates:

- Two new groups of substances are proposed to be listed as POPs:
- Chlorinated paraffins (C14-C17, ≥ 45 % chlorine) and
- LC-PFCAs (long-chain (C9-C21) perfluorocarboxylic acids), its salts and related compounds.

Further details on updates have been included in "AL RSL – individual substances" (document number CRC-22-002 rev 2.0).