



BOMcheck v8.1 Quick
Reference Guide

Summary Table

Substance name	Category	Action required?
<u>Bis(α,α-dimethylbenzyl) peroxide</u>	REACH Candidate List (SVHC)	Yes. In the majority of uses this substance will be reacted. However, it may be present in products where it is used in Expanded Polystyrene (EPS) as a co-synergist for flame retardant grades.
<u>Bisphenol S (BPS)</u>	Proposition 65	Yes. Bisphenol S (BPS) is structurally similar to Bisphenol A (BPA) and they both have similar hazard profiles. BPS is most widely used as an alternative to BPA in thermal paper. BPS may also be used as a monomer in the production of PES and synthetic tanning agents and in the manufacturing of paper and food contact materials. Substitution of BPA with BPS is also possible in other applications where BPA is used.
<u>Silicon carbide whiskers</u>	Proposition 65	Yes. Silicon carbide whiskers are used as reinforcement materials for ceramics, metals and plastics.
Coal-tar pitch	Proposition 65	No. Coal tar pitch is extensively used in the aluminum industry for smelting electrodes, as well as in roofing materials, surface coatings, pavement sealants, and pitch coke production. Applications of coal tar pitch are unlikely to result in exposure to the consumer.
Fluoro-edenite fibrous amphibole	Proposition 65	No. There is limited information showing the uses and application of fluoro-edenite fibrous amphibole which only occurs naturally. Fluoro-edenite fibrous amphibole is not commonly used in electronic applications or other products.
<u>Ethylene Oxide</u>	Proposition 65	Yes. Ethylene oxide is primarily used as a process chemical or in the sterilization of products via a gas diffusion process

Summary Table

Substance name	Category	Action required?
Hexabromocyclododecane (HBCDD)	Other Restricted or Declarable Substances – EU POPs	Yes. HBCDD which is restricted under Annex 1 of EU POPs Regulation (EU) 2019/1021 has been updated in BOMcheck with a stricter concentration limit in preparation for an amendment to the Unintentional Trace Contaminant (UTC) limit.
Lead in batteries	Battery restrictions	Yes, but only for parts containing batteries. The entry for lead in batteries has been amended to allow companies to collect data for all types of batteries.
<u>EU MDR – CMR 1A & 1B and endocrine disrupting substances</u>	Other Restricted or Declarable Substances – Restrictions which apply to medical devices	Yes, but only for manufacturers of parts/equipment used for medical devices. The CMR 1A & 1B substances list in the RCD tool has been updated to include additional substances from the 21st ATP.
<u>BOMcheck PFAS list</u>	Additional Lists - PFAS	Yes. The BOMcheck PFAS list has been expanded to include 9 new additional PFAS known to be present in products.
<u>Expanded polystyrene (EPS) and other polymeric foam materials (e.g., EPP, EPE, EVA)</u>	Packaging declaration & Packaging statement	<p>Yes, but only for packaging.</p> <ul style="list-style-type: none"> Expanded polystyrene (EPS) is usually white and made of pre-expanded polystyrene beads. EPS and other polymeric foam materials are commonly used as packing material for cushioning fragile items inside boxes. Styrenic polymer packaging is commonly used in various industries such as medical packaging, food packaging, and other applications. Degradable plastic (including oxo-degradable plastic) is plastic with additives included which are designed to make the material fragment so that it degrades more easily.
<u>Non-recyclable styrenic polymers or copolymers</u>		
<u>Degradable plastic (including oxo-degradable plastic)</u>		

Bis(α,α -dimethylbenzyl) peroxide

CAS: 80-43-3

Declaration required

- SVHC
- Can be found in supplied articles
>0.1% w/w



Applications

- Bis(α,α -dimethylbenzyl) peroxide also known as also known as Dicumyl Peroxide may be used as an additive in EPS as a co-synergist for flame retardant grades
- In all other applications, the substance is used as a cross-linking agent where it is reacted and so not present in final products



Bisphenol S (BPS)

CAS: 80-09-1



Applications

- BPS is most widely used as an alternative to BPA in thermal paper
 - can be present up to 3% by weight of the paper
- BPS can be used as an antioxidant in PVC up to 0.2% w/w
- BPS may also be used as a monomer in the production of PES and synthetic tanning agent and in the manufacturing of paper and food contact materials
- Substitution of BPA with BPS is also possible in other applications where BPA is used.

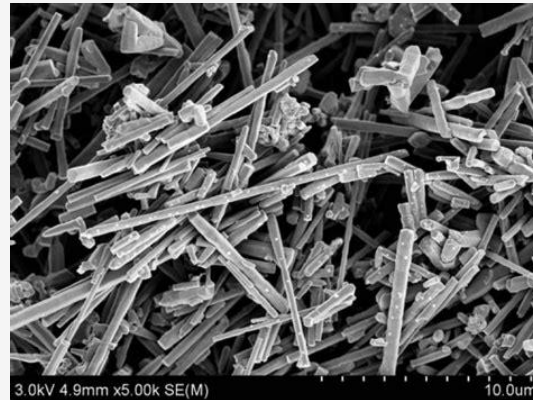
Declaration required

- Applications of this substance may result in exposure to the consumer
- Added to the Proposition 65 list with a limit of 0.1% w/w of any material
- BPS is restricted at a maximum concentration of 0.02% (200 ppm) w/w in thermal paper as part of the ORRChem regulation in Switzerland and is also an SVHC under REACH

Silicon Carbide Whiskers

Declaration required

- Proposition 65 substance
- Applications of this substance may result in exposure to the consumer
- Added to BOMcheck with a limit of 0.1% w/w of any material



Applications

- Silicon Carbide (SiC) whiskers are a high-strength and oxidation-resistant ceramic material
- There are two main types with the β -type considered superior due to higher hardness, toughness, electrical conductivity, anti-wear, high-temperature resistance, and corrosion resistance
- The whiskers can be combined with a variety of different materials:
 - SiC Whisker Toughened Metal Matrix Composite
 - SiC Whisker Toughened Ceramic Matrix Composite
 - SiC Whisker Toughened Polymer Composite
- Applications include:
 - Automotive and machinery
 - Sports equipment
 - Cutting tools
 - Aerospace components
 - Ceramic materials
 - PVC

Ethylene Oxide

CAS:75-21-8

Declaration required

- Proposition 65 substance
- Applications of this substance may result in exposure to the consumer
- Added to BOMcheck with a limit of 0.1% w/w of any material

Applications

- Ethylene oxide is primarily used as a process chemical or in the sterilization of products via a gas diffusion process
- It may remain detectable in the product when used for sterilisation purposes



Updated EU MDR (CMR 1A & 1B and endocrine disrupting) substances

Declaration required

- Action is only required for parts used in medical devices and where the part has invasive contact with the patient
- The CMR 1A & 1B substances list in the RCD tool has been updated to include additional substances from the 21st ATP
- The entry for CMR 1A & 1B substances in the RCD tool will be set to “missing information” for all applicable suppliers due to the updated list
- Suppliers must indicate compliance “Yes” or “No” to the updated list
- The full list and screening of CMR 1A and 1B substances is available [here](#)

CMR 1A and 1B substances and endocrine disrupting substances



0.1% by weight (1 000ppm) in any material which has invasive contact with the patient, or any material which transports or stores fluids or gases which contact the patient

Yes

No

Missing

BOMcheck PFAS List

Declaration required


- BOMcheck version 8.1 adds 9 additional PFAS to the list that were not included previously

CAS	name	uses
116-14-3	Tetrafluoroethylene	A monomer for producing PTFE and other fluoropolymers. Unlikely to be used in a product directly but may be present as unreacted monomer or degradation product
1478-61-1	Bisphenol AF	Bisphenol AF is a fluorinated derivative of bisphenol A (BPA), offering unique properties due to the presence of fluorine atoms. It is used in a variety of applications (including the electronics industry), leveraging its thermal stability, chemical resistance, and other performance characteristics.
159120-95-3	A mixture of: bis[4-diphenylsulfoniumphenyl]sulfide-bis-hexafluoroantimonate; thiophenoxyphenylsulfonium hexafluoroantimonate	UVI-6976 photoinitiator is used to UV-cure cycloaliphatic epoxide resins, vinyl ethers and other cationically curing materials.
811-97-2	1,1,1,2-Tetrafluoroethane	1,1,1,2-Tetrafluoroethane, commonly known as R-134a, is a hydrofluorocarbon (HFC) compound used in various applications, primarily as a refrigerant
1017237-78-3	2-Propenoic Acid, 2-[Methyl[(Nonafluorobutyl)Sulfonyl]Amino]Ethyl Ester, Telomer With Methyloxirane Polymer With Oxirane Di2-Propenoate and Methyloxirane Polymer With Oxirane Mono-Propenoate	Used as primary ingredient in surfactant designed to lower surface tension and help coatings overcome problems caused by surface contamination
113114-19-5	Oxetane, 2,2,3,3-tetrafluoro-, homopolymer, fluorinated	Polymer that provides useful properties including high chemical resistance, thermal stability, and dielectric properties. May be used in coatings, electronics and adhesives and sealants
94228-79-2	2,3,3,4,4,5,5-Heptafluoro-1-pentene polymer with ethene and tetrafluoroethene	fluoropolymer

BOMcheck PFAS List

Declaration required

- If you suspect your part(s) contain any of the 839 PFAS above the concentration limit of “No intentionally added content” you should indicate this in the RCD tool by selecting compliance = No
 - You can select individual PFAS by searching for the substance name or CAS number in the dropdown box; or
 - You can use the new CAS checker to upload a list of CAS numbers and BOMcheck will automatically display any matches Non-matching CAS numbers are not saved
- The complete list of 839 PFAS with CAS numbers is available [here](#)

BOMcheck PFAS List			Set All		
Substances	Maximum Concentration	Does the part contain less than the maximum concentration?			
Per and polyfluoroalkyl substances PFAS	 No intentionally added content	<input type="button" value="Yes"/>	<input type="button" value="No"/>	<input type="button" value="Missing"/>	

Packaging Statement and Declaration

Declaration required

- You should update your packaging statement for these new entries
- No action is required to update your RCDs for these materials which apply only to packaging

Entry	Threshold	Details
Expanded polystyrene (EPS) and other polymeric foam materials (e.g, EPP, EPE, EVA)	No content permitted	Expanded polystyrene (EPS) is usually white and made of pre-expanded polystyrene beads. EPS and other polymeric foam materials are commonly used as packing material for cushioning fragile items inside boxes.
Non-recyclable styrenic polymers or copolymers	No content permitted	Styrenic polymer packaging is commonly used in various industries such as medical packaging, food packaging, and other applications.
Degradable plastic (including oxo-degradable plastic)	No content permitted	Degradable plastic (including oxo-degradable plastic) is plastic with additives included which are designed to make the material fragment so that it degrades more easily.



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