

BOMcheckAdmin@Sphera.com February 2024

# **Summary Table**

Substance name	Category	Action required?
2,4,6-tri-tert-butylphenol	REACH Candidate List (SVHC)	No. This substance is used as an additive in fuels and lubricants and as a starting material/intermediate in the production of other chemicals for industrial uses. It is unlikely to be present in supplied articles >0.1% w/w.
2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)	REACH Candidate List (SVHC)	Yes. UV-329 is used as a UV-protection agent in a variety of plastic products, particularly in polyesters, polyvinyl chlorides, styrenics, acrylics, polycarbonates and polyvinyl butyral. Typical addition rates are 0.1-3 % w/w of the polymer, depending on the polymer and the desired level of UV protection.
2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one	REACH Candidate List (SVHC)	No. This substance is used as a photo-initiator for UV inks and coatings. In all applications due to the reactive nature of the substance, it is not expected to be present in the supplied article >0.1% w/w as it will be reacted or cured.
Bumetrizole (UV-326)	REACH Candidate List (SVHC)	Yes. UV-326 is used as a UV-protection agent in a variety of plastic products.
Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	REACH Candidate List (SVHC)	Yes. This substance may be present above 0.1% w/w in adhesives and sealants, printing inks, rubber formulations, polymer production and as an antioxidant in rubber.
Anthracene	Proposition 65	No. Anthracene is used as an intermediate in the production of dyes and pesticides. It is used in pyrotechnics for film and theatre productions as a component of black smoke. Anthracene is also found in coal tar derivatives such as creosote used for the treatment of wood for use in the construction industry.
<u>Dimethyl hydrogen phosphite</u>	Proposition 65	Yes. Dimethyl hydrogen phosphite is primarily used as a flame retardant for nylon 6 fibres and cotton textiles when combined with guanidine and formaldehyde. It may be used in the production of pesticides, lubricant additives, adhesives, pharmaceuticals, and fragrances.

Substance name	Category	Action required?
PFHxS, its salts and PFHxS-related compounds	Other Restricted or Declarable Substances – EU POPs	No. This substance is now restricted under EU POPs but has already been added to BOMcheck with the same threshold due to ORRChem legislation in Switzerland.
Dechlorane Plus	Other Restricted or Declarable Substances – EU POPs (draft)	Yes. Dechlorane Plus is a chlorinated flame retardant used in a very wide range of polymers with addition rates ranging from 8% up to 40% by weight.
<u>UV-328</u>	Other Restricted or Declarable Substances – EU POPs (draft)	Yes. UV-328 is used as a UV protection agent in plastics, rubber and polyurethane.
Lead and its compounds in PVC	REACH Restrictions (Annex XVII)	Yes. The EU has expanded the restriction of lead to PVC articles under entry 63 to Annex XVII of REACH. The latest amendment restricts lead to less than 0.1% in PVC polymer and copolymer articles.
Formaldehyde and formaldehyde- releasing substances	REACH Restrictions (Annex XVII)	Yes. Formaldehyde is mostly used as a chemical intermediate to manufacture formaldehyde-based resin and other chemicals and has limited applications as a biocide. Formaldehyde releasers are mainly used in producing articles such as wood-based products, furniture, wall coverings, foams and textiles that can release formaldehyde during use.
Diisooctyl phthalate (DIOP)	Other Restricted or Declarable Substances – France Labelling Requirement	Yes. Diisooctyl phthalate (DIOP) is a phthalic acid diester used primarily as a plasticizer in products like automotive hoses, building wire jackets, and children's toys. It is also used in some consumer goods, pharmaceutical research, and food products. In flexible PVC the typical phthalate content can range from 20 to 50% w/w.
1,3-benzenediol (resorcinol)	Other Restricted or Declarable Substances – France Labelling Requirement	No. All uses of this substance are as an intermediate and so the substance is reacted. Where it is used in RF (Resorcinol-Formaldehyde) adhesives above 0.1%, it is reacted in the curing process.
EU MDR – CMR 1A & 1B and endocrine disrupting substances	Other Restricted or Declarable Substances – Restrictions which apply to medical devices	Yes, but only for manufacturers of parts/equipment used for medical devices. Additional CMR 1A and 1B substances have been added to the list in BOMcheck.



# 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)

#### **Declaration required**

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



- UV-329 is used as a UV-protection agent in a variety of plastic products, particularly in polyesters, polyvinyl chlorides, styrenics, acrylics, polycarbonates and polyvinyl butyral
- Typical addition rates are 0.1-3 % w/w of the polymer, depending on the polymer and the desired level of UV protection.





# Bumetrizole (UV-326) CAS: 3896-11-5

#### **Declaration required**

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

- UV-326 is used as a UV-protection agent in a variety of plastic products
- UV-326 has a wide range of indirect food approvals in polyolefins. It has low volatility at high temperatures and high resistance to thermal degradation and can, therefore, be used without significant loss or decomposition in the polyolefin compounding and moulding processes





# Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol CAS: -

## **Declaration required**

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





#### **Applications**

 This substance may be present in adhesives and sealants, printing inks, rubber formulations, polymer production, and as an antioxidant in rubber



## Dimethyl hydrogen phosphite CAS: 868-85-9

#### **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



- Dimethyl hydrogen phosphite is primarily used as a flame retardant for nylon 6 fibres and cotton textiles when combined with guanidine and formaldehyde
- It may be used in the production of pesticides, lubricant additives, adhesives, pharmaceuticals, and fragrances



## Dechlorane Plus CAS: 13560-89-9

# **Declaration required**

- Stockholm Convention (EU POPs)
- Added to BOMcheck with a threshold of "No intentionally added content"

## **Applications**

 Dechlorane Plus is a chlorinated flame retardant used in a very wide range of polymers with addition rates ranging from 8% up to 40% by weight











## UV-328 CAS: 25973-55-1

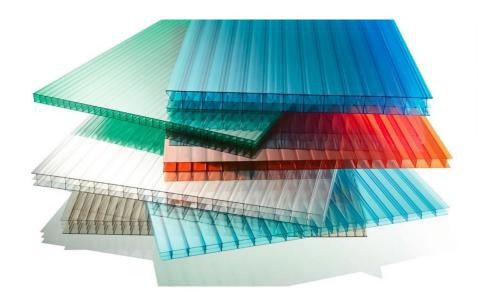
## **Declaration required**

- Stockholm Convention (EU POPs)
- Added to BOMcheck with a threshold of "No intentionally added content"



## **Applications**

 UV-328 is used as a UV protection agent in plastics, rubber and polyurethane



# **Lead and its compounds in PVC**

## **Declaration required**

- The EU has expanded the restriction of lead to PVC articles under entry
   63 to Annex XVII of REACH
- The latest amendment restricts lead to less than 0.1% in PVC polymer and copolymer articles

#### **Applications**

Lead is added to PVC as a stabiliser to enhance its thermal stability and extend its lifespan, especially when exposed to heat and sunlight.

Lead stabilisers effectively neutralise hydrochloric acid released by PVC as it degrades, preventing damage to the material and extending its useful life.

Typical applications include:

- Construction Materials: e.g. Window frames, doors, pipes, siding, roofing
- Piping and Plumbing: e.g. Drinking water and wastewater systems
- Medical Devices: e.g. Blood bags, IV tubing, dialysis equipment
- Electrical Cable Insulation: e.g. Insulation for cables and wiring
- Flooring and Wall Coverings: e.g. Vinyl tiles and wall coverings
- Automotive Parts: e.g. Dashboard trim, door panels, floor mats
- Packaging: e.g. Blister packs, clamshells, food containers
- Furniture: e.g. Indoor and outdoor furniture, upholstery
- Toys: e.g. Wide range of children's toys
- Clothing and Footwear: e.g. Raincoats, boots, bags



# Formaldehyde and formaldehyde-releasing substances

#### **Declaration required**

- The EU has issued Regulation (EU) 2023/1464 to regulate formaldehyde and formaldehyde-releasing substances in articles
- Formaldehyde is restricted in products where the release rate exceeds 0.080 mg/m3
- A stricter release rate limit of 0.062 mg/m3 applies to furniture and wood-based articles



- Formaldehyde is mostly used as a chemical intermediate to manufacture formaldehyde-based resin and other chemicals and has limited applications as a biocide.
- Formaldehyde releasers are mainly used in producing articles such as wood-based products, furniture, wall coverings, foams, and textiles



# Diisooctyl phthalate (DIOP)

#### **Declaration required**

- France labelling requirement
- Can be found in supplied articles >0.1% w/w
- Consumer information relating to the presence of a dangerous substance applies when it is present in a concentration greater than 0.1% by weight in a substance, mixture or article

- Diisooctyl phthalate (DIOP) is a phthalic acid diester used primarily as a plasticiser in products like automotive hoses, building wire jackets, and children's toys
- It is also used in some consumer goods, pharmaceutical research, and food products
- In flexible PVC the typical phthalate content can range from 20 to 50% w/w.









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

#### **Declaration required**

- Action is <u>only required for parts used in medical devices</u>
- The CMR 1A & 1B substances list in the RCD tool has been updated to include additional substances and applicable new SVHCs
- 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 is available here

