TÜV Rheinland LGA Products – Information

01/2020

Four SVHC added, three SVHC proposed

The European Chemicals Agency (ECHA) added four Substances of Very High Concern (SVHC) to the REACH Candidate List on 16th January 2020. The Candidate List contains now 205 substances.

Once a substance identification took place, it is included in the Candidate List. The inclusion in the Candidate List brings immediate obligations for suppliers as per Article 33 REACH. These obligations may apply to the listed substance on its own, in mixtures or in articles.

Substances included in the Candidate List for authorisation on 16 January 2020:

1 Diisohexyl phthalate (CAS 71850-09-4)

Diisohexyl phthalate has similar applications as the other phthalates already included in the candidate list.

The substance is commonly found in the polymer manufacture (as a plasticiser in polymers) and in chemical synthesis products, therefore it occurs in chemical mixtures and consumer products.

Substance assessment

Various companies and associations restrict and regulate the use of the substance in their Restricted Substances Lists (RSLs) for several years. The testing of Diisohexyl phthalate is similar to the other regulated phthalates.
Noticeable findings above 0.1 % rarely reported but it is not possible to exclude.

2 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone (CAS 119313-12-1)

2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone belongs to the chemical group of alkylaminoacetophenones (AAAPs), which mainly used in acrylate- and methacrylate-based formulations.

According to the literature, the main use is as photoinitiators in polymer production. Photoinitiators are components of radiation-curing paint and resin formulations that can be cured in a fraction of a second by irradiation with UV light. During this process, a degradation of the substance takes place simultaneously.

Another application of the substances are in high-speed inks such as flexo, offset litho and UV inkjet.

Substance assessment

Finding of contents above 0.1% in articles is very unlikely. Several potential alternatives are available for both substances, according to the Annex XV reports.

3 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one (CAS 71868-10-5)

Same as 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone it is used as photoinitiators in polymer production.

Substance assessment

Please refer to 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone

4 Perfluorobutane sulfonic acid (PFBS) and its salts

PFBS belongs to the group of per- and polyfluoroalkyl substances (PFAS).

It consists of a C4 perfluoroalkyl chain attached to a sulfonic acid group. PFBS belongs to the short-chain PFASs. Other PFBS-related substances are mainly used as water and stain repellent protection for leather, textiles and carpets catalyst as well in polymer manufacture and chemical synthesis

PFBS is similar to the more well-known perfluorooctane sulfonic acid (PFOS), but PFOS carries a C8 perfluoroalkyl chain. The use of many C8 perfluorinated compounds is already regulated as SVHC substances, under Annex XVII of REACH as well as Annex I of POP Regulation.

Other uses of C4 perfluorinated compounds are also addressed now. This includes the use as a catalyst/ additive/reactant in polymer manufacture, in chemical synthesis and as a flame retardant in polycarbonate (for electronic equipment).

Substance assessment

The main use of the substance is in finishing and treatment of articles. Contents above 0.1% in articles are not to be expected.

However, it is important to consider whether and for how long the use of C4, C6 and C8 perfluorinated compounds can continue and how the substitution of these substances, because of a foreseeable inclusion to the authorisation list, take place. The substitution within the production due to its outstanding dirt and oil-repellence might be very challenging for the industry.

Any supplier of articles containing a Candidate List substance above a concentration of 0.1 % (weight by weight) has communication obligations towards customers down the supply chain and to consumers.

In addition, importers and producers of articles containing the substance (> 0.1 % w/w) have six months from the date of its inclusion in the candidate list (16 January 2020) to notify ECHA if the substance is present in the articles in quantities above one tonne per producer/importer per year.

Substances on the Candidate List are candidates for eventual inclusion in Annex XIV of REACH (the Authorisation List). Once they are on the Authorisation List, the industry will need to apply for permission to continue using the substance after the sunset date.

Substances with the following hazard properties maybe identified as SVHCs:

- Substances meeting the criteria for classification as carcinogenic, mutagenic or toxic for reproduction (CMR) category 1A or 1B in accordance with the CLP Regulation.
- Substances, which are persistent, bio accumulative and toxic (PBT) or very persistent and very bio accumulative (vPvB) according to REACH Annex XIII.
- Substances on a case-by-case basis, that cause an equivalent level of concern as CMR or PBT/vPvB substances.

Proposal for three substances added to the candidate list by Sweden

Sweden has submitted to ECHA its intention to identify the following three substances of very high concern (SVHCs).

The substances will now appear on the registry of SVHC intentions until outcome. This registry aims to make interested parties aware of substances for which there are plans to submit an SVHC dossier to the agency.

For all three substances, the reason for inclusion is toxic for reproduction (Article 57 (c)).

1 Dibutylbis(pentane-2,4-dionato-O,O')tin (CAS 22673-19-4)

The substance used similar to other organotin compounds as catalyst in the production of coatings and paints or polymer preparations and compounds.

The foreseeable concentration in articles is less than 0.1%.

2 2-methylimidazole (CAS 693-98-1)

Uses for the substances are as a starting material, a chemical intermediate in the manufacture of pharmaceuticals, photographic- and photo-thermographic chemicals, dyes and pigments, agricultural chemicals, and rubber.

At the time, being it is unknown if the concentrations is above 0.1% in polymers or articles.

3 1-vinylimidazole (CAS 1072-63-5)

Uses for the substances are as a monomer for polymerization of lubricant, coating additive, emulsifier, polymer for metal ion filtration and in home care applications (dye transfer inhibition) and personal care applications (hair care).
The content of the conspicuously smelly residual monomers in the product can be reduced to harmless quantities by means of correspondingly adapted production processes.

At the time, being it is unknown if the concentrations is above 0.1% in polymers or articles.

If no relevant objections present before 3 February, and the examination of the existing dossiers does not reveal any anomalies, then in approximately 5-6 months these substances will be included in the list of Substances of Very High Concern (SVHC).

For further technical information, please contact us:

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