AGREEMENT OF THE MEMBER STATE COMMITTEE

ON THE IDENTIFICATION OF

BENZO[GHI]PERYLENE

AS A SUBSTANCE OF VERY HIGH CONCERN

According to Articles 57 and 59 of
Regulation (EC) 1907/2006[1]

Adopted on 1 June 2018

This agreement concerns

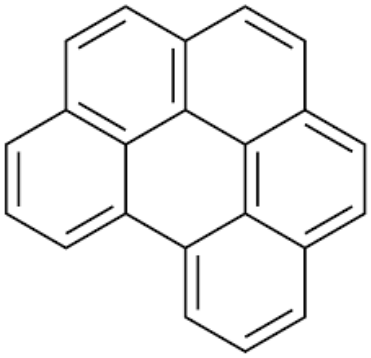
Substance name: Benzo*[ghi]*perylene (BgP)

EC number: 205-883-8

CAS number: 191-24-2

Molecular formula: $C_{22}H_{12}$

Structural formula:



[1]Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

Denmark presented a proposal in accordance with Article 59(3) and Annex XV of the REACH Regulation (01 March 2018, submission number SPS-014020-18) on identification of *Benzo[ghi]perylene* as a substance of very high concern due to its persistent, bioaccumulative and toxic (PBT) and very persistent and very bioaccumulative (vPvB) properties.

The Annex XV dossier was circulated to Member States on 8 March 2018 and the Annex XV report was made available to interested parties on the ECHA website on the same day according to Articles 59(3) and 59(4).

Comments were received from both Member States and interested parties on the proposal.

The dossier was referred to the Member State Committee on 22 May 2018 and agreed in the written procedure of the Member State Committee with closing date of 1 June 2018.

Agreement of the Member State Committee in accordance with Article 59(8):

Benzo[ghi]perylene (BgP) is identified as a substance of very high concern because

- it meets the criteria of Article 57 (d) of Regulation (EC) 1907/2006 (REACH) as a substance which is persistent, bioaccumulative and toxic, and
- it meets the criteria of Article 57 (e) of Regulation (EC) 1907/2006 (REACH) as a substance which is very persistent and very bioaccumulative,

in accordance with the criteria and provisions set out in Annex XIII of Regulation (EC) 1907/2006 (REACH).

UNDERLYING ARGUMENTATION
FOR IDENTIFICATION OF A SUBSTANCE OF VERY HIGH CONCERN

Persistence, bioaccumulation and toxicity (PBT)

There are only few studies available on the persistency, bioaccumulation and toxicity of BgP in the aquatic and soil environment. The limited information is, however, supported by studies of other PAHs with a four or five ring structure with respect to the degradation, bioaccumulation and toxicity to aquatic organisms.

Persistence

The observed half-lives of BgP in soil microcosms are in the range of 365-535 days. Moreover, a long-term field experiment reported a half-life in soil of 9.1 years. As these half-lives in soil exceed the P- and vP-criteria (half-life of 120, respectively 180 days in soil), it is concluded that the P- and vP-criteria are fulfilled by BgP.

Bioaccumulation

A bioconcentration factor (BCF) of 28288 has been reported in a static test with *Daphnia magna*. This BCF value exceeds the B- and vB criteria (measured BCF values in aquatic species > 2000 and > 5000, respectively) and it is concluded that the B- and vB-criteria are fulfilled by BgP.

Toxicity

The EC_{10} (reproduction) of BgP has been determined at 0.082 µg/L in a long-term study (7d) with the aquatic invertebrate *Ceriodaphnia dubia*. As the EC_{10} is lower than the T criteria (the long-term no-observed effect concentration (NOEC) or EC_{10} for marine or freshwater organisms is less than 0.01 mg/l) it is concluded that the T-criteria is fulfilled by BgP.

Overall conclusion

In conclusion, BgP meets the criteria for a PBT and vPvB substance according to Article 57(d) and (e) of REACH by comparing all relevant and available information according to Annex XIII of REACH with the criteria set out in the same Annex, in a weight-of-evidence determination.

Reference:

Support Document on *benzo[ghi]perylene* (Member State Committee, 1 June 2018)