

TC NES SUBGROUP ON IDENTIFICATION OF PBT AND VPVP SUBSTANCES

RESULTS OF THE EVALUATION OF THE PBT/VPVB PROPERTIES OF:

Substance name: Anthracene oil, anthracene paste, distn. lights

EC number: 295-278-5

CAS number: 91995-17-4

Molecular formula: Not applicable

Structural formula: Not applicable

Summary of the evaluation:

Anthracene oil, anthracene paste, distn. lights is considered to be a UVCB substance with PBT/vPvB constituents. The constituent anthracene (CAS 120-12-7) is a PBT and vPvB substance (see PBT summary No. 32).

JUSTIFICATION

1 IDENTIFICATION OF THE SUBSTANCE AND PHYSICAL AND CHEMICAL PROPERTIES

Name: Anthracene oil, anthracene paste, distn. lights
 EC Number: 295-278-5
 CAS Number: 91995-17-4
 IUPAC Name:
 Molecular Formula: Not applicable
 Structural Formula: Not applicable
 Molecular Weight: Not applicable
 Synonyms: Anthracene vorlauf

1.1 PURITY/IMPURITIES/ADDITIVES

Anthracene oil, anthracene paste, distn. lights is a UVCB substance. Based on its production process and that the producer has provided data on properties of its constituents, it can be concluded to contain at least anthracene (CAS 120-12-7), fluorene (CAS 86-73-7) and phenantrene (CAS 85-01-8).

1.2 PHYSICO-CHEMICAL PROPERTIES

Table 1 Summary of physico-chemical properties

REACH ref Annex, §	Property	Value	Comments
VII, 7.1	Physical state at 20 C and 101.3 Kpa	Solid	European Commission (2000)
VII, 7.2	Melting/freezing point		
VII, 7.3	Boiling point		
VII, 7.5	Vapour pressure		
VII, 7.7	Water solubility		
VII, 7.8	Partition coefficient n-octanol/water (log value)		
	Dissociation constant	-	

Physical-chemical properties of the constituents anthracene, fluorene and phenantrene have been provided by the notifier.

2 MANUFACTURE AND USES

Anthracene oil, anthracene paste, distn. lights is one of the downstream products of distillation of coal tar, high temperature (65996-89-6). One company has provided information on the substance under Regulation 03/793/EEC according to the IUCLID (European Commission, 2000). The substance is produced by distillation of molten anthracene paste as the first cut.

No specific information on the use of the substance is available (European Commission, 2000).

3 CLASSIFICATION AND LABELLING

The substance is classified as carcinogenic (Cat 2), R45 in the Directive 67/548/EEC (with nota H).

4 ENVIRONMENTAL FATE PROPERTIES

Environmental fate of anthracene oil, anthracene paste, distn. lights can be roughly estimated based on the properties of its constituents. For fate properties of anthracene, fluorene and phenantrene, see the PBT summary fact sheets of anthracene (CAS 120-12-7, PBT summary No. 32) and coal tar pitch, high temperature (CAS 65996-93-2, PBT summary No. 54).

4.1 DEGRADATION (P)

4.1.1 Abiotic degradation

4.1.2 Biotic degradation

4.1.3 Other information ¹

4.1.4 Summary and discussion of persistence

4.2 ENVIRONMENTAL DISTRIBUTION

4.2.1 Adsorption

4.2.2 Volatilisation

4.2.3 Long-range environmental transport

¹ For example, half life from field studies or monitoring data

4.3 BIOACCUMULATION (B)

4.3.1 Screening data²

4.3.2 Measured bioaccumulation data³

4.3.3 Other supporting information⁴

4.3.4 Summary and discussion of bioaccumulation

5 HUMAN HEALTH HAZARD ASSESSMENT

Data not reviewed for this report.

6 ENVIRONMENTAL HAZARD ASSESSMENT

There are no data available on the ecotoxicity of anthracene oil, anthracene paste, distn. lights. For ecotoxicity of its constituents, see the PBT summary fact sheets of anthracene (CAS 120-12-7) and coal tar pitch, high temperature (CAS 65996-93-2).

6.1 AQUATIC COMPARTMENT (INCLUDING SEDIMENT)

6.1.1 Toxicity test results

6.1.1.1 Fish

Acute toxicity

Long-term toxicity

6.1.1.2 Aquatic invertebrates

Acute toxicity

Long-term toxicity

² For example, log K_{ow} values, predicted BCFs

³ For example, fish bioconcentration factor

⁴ For example, measured concentrations in biota

6.1.1.3 Algae and aquatic plants**6.1.2 Sediment organisms****6.1.3 Other aquatic organisms****6.2 TERRESTRIAL COMPARTMENT****6.3 ATMOSPHERIC COMPARTMENT****7 PBT AND VPVB****7.1 PBT, VPVB ASSESSMENT**

Summary: anthracene oil, anthracene paste, distn. lights is considered to be a UVCB substance with PBT/vPvB constituents. The constituent anthracene (CAS 120-12-7) is considered to be a PBT and vPvB substance.

INFORMATION ON USE AND EXPOSURE

Data not reviewed for this report.

OTHER INFORMATION

The information used in this report was taken from the following source:

European Commission (2000) IUCLID Dataset, anthracene oil, anthracene paste, distn. lights, CAS 91995-17-4, 19.2.2000.