

# DSBP (distyrylbiphenylsulfonate)

(CAS numbers: e.g. 27344-41-8, EC number: 248-421-0  
/ Entry number in HELCOM list of substances of concern: 13)

General sectors: Industry and commercial products, personal care product



## Why a HELCOM concern?

### Main evidence

**P** Approximately **100 - 400 kg of DSBP** are estimated to enter the Baltic Sea every year via WWTP emissions. Additional riverine inputs beyond the WWTP contributions are possible. Given that the substance is **suspect as persistent, bioaccumulative, and very toxic**<sup>3</sup>, current inputs are likely significant, in terms of risk they pose for the Baltic Sea and its ecosystem services. The data on WWTP discharges (2010-2019) originates from the study of Undeman et al. (2022)<sup>2</sup>.

**I** Current inputs to the Baltic Sea indicate potential negative impacts at least on pelagic biota.

### Overall assessment

When assessing current levels in the Baltic Sea (no relevant measurement data), current inputs, and the severity of the relevant toxicity mechanism, DSBP scores **30-91/100** in the scale established for assessing the overall risk for impacts/threat for the Baltic Sea, where 50 indicates concern, 100 extreme risk, and the width of the span outlines the uncertainty in the assessment.

## Facts relevant for management considerations

### Causal chain and pathways

**A** The EU REACH registered volume for DSBP is 10,000 – 100,000 t/y<sup>3</sup>. Registered uses include consumer and professional uses (cleaning and maintenance products), as well as industrial uses (pulp, paper and paper products, textile finishing, etc.). It is also authorised in the EU for use in personal care products, with the following functions: hair conditioning, surfactant - cleansing, UV absorber, viscosity controlling<sup>4</sup>.

**S** **?** *In order to further improve the evaluation of the risk, relevant aspects to consider are a review of the relevant toxicity thresholds (expected relevant matrices) and marine monitoring or modelling for predicted environmental concentrations based on estimated inputs.*

### Relevant policies (existing or planned measures)

**M (on A/P)** • According to information by ECHA, **a PBT assessment for DSBP is under development**<sup>5</sup>. However, the latest update about the intention for this assessment by the respective Member State is from 2015.

## References:

1. 2. 3. 4. 5.

[Note: Listing of detailed references will be provided in an upcoming update of the fact sheet – for a listing of the most common references among the different substances see the section at the end of the consolidated document which includes all the fact sheets]