# Octadecanamide

General sectors: Industry and commercial products

(CAS numbers: e.g. 124-26-5, EC number: 204-693-2 / Entry number in HELCOM list of substances of concern: 18)

DRIVERS ACTIVITIES PRESSURES STATE IMPACTS

# Why a HELCOM concern?

#### Main evidence

S Concentrations of a substance tentatively identified as Octadecanamide exceed the applied threshold value in all the **10** examined areas (assessment units) of the Baltic Sea. The threshold is exceeded in both coastal and off-shore areas (**2**/2 assessed off-shore areas). In these 10 areas, **100%**<sup>\*</sup> of the assessible samples of **sediment and/or biota** exceed the threshold value. This is based on suspect screening data from the project PreEMPT<sup>1</sup>. A total number of 21 data points were possible to evaluate for this substance.

By further considering how much above or below the threshold each concentration is, and how often the substance is detected, Octadecanamide scores 8.3/10 (confidence range: 4.1 - 8.5) in the scale established when assessing the criticality/significance of current levels in the Baltic Sea pose, where 5 indicates concern and 10 extreme risk, and the range reflects the level of reliability and representativeness of concentrations and the thresholds.

The threshold values for Octadecanamide, in sediment and biota, were acquired from the NORMAN Network ecotoxicology database<sup>2</sup>.



Current levels in the Baltic Sea indicate potential negative impacts on pelagic biota and/or sediment-dwelling organisms and/or top predators such as mammals and birds.

#### **Overall assessment**

When assessing current levels in the Baltic Sea, current inputs, and the severity of the relevant toxicity mechanism, Octadecanamide scores **43**-**86/100** 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 Octadecanamide is 1,000 - 10,000 t/y<sup>3</sup>. Registered uses include industrial, professional, and consumer uses in adhesives, coatings or inks, production and use of plastics and rubber products, etc<sup>4</sup>.

**S** ? In order to further improve the evaluation of the risk, the first aspect to consider is identity confirmation (PreEMPT samples). If identity is confirmed, then a further aspect to consider is a review of the relevant toxicity thresholds (sediment, biota).

#### Relevant policies (existing or planned measures)

M (on A/P) • It is covered by an Assessment of Regulatory Needs, prepared by the ECHA, on aliphatic primary amides<sup>5</sup>. According to this document, Octadecanamide is considered as inconclusive for aquatic toxicity (hazard potential needs to be clarified) and wide dispersive uses are noted.

## **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]

| \* considering that there were also inconclusive non-detections (in terms of exceedance, due to a relatively high limit of detection), it is possible that the actual average frequency of exceedance in these areas is somewhat lower, but in any case >70%.