# Justification for the selection of a substance for CoRAP inclusion

Substance Name (Public Name):	N,N'-Ethylenebis(3,4,5,6- tetrabromophthalimide)
Chemical Group:	
EC Number:	251-118-6
CAS Number:	32588-76-4
Submitted by:	Norway
Date:	17/03/2015

#### Note

This document has been prepared by the evaluating Member State given in the CoRAP update.

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# **1** IDENTITY OF THE SUBSTANCE

# **1.1** Other identifiers of the substance

#### Table 1: Substance identity

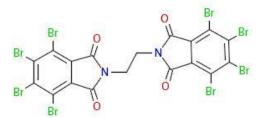
EC name:	N,N'-ethylenebis(3,4,5,6-tetrabromophthalimide)
IUPAC name:	2,2'-ethane-1,2-diylbis(4,5,6,7-tetrabromo-1H- isoindole-1,3(2H)-dione)
Index number in Annex VI of the CLP Regulation	n.a.
Molecular formula:	$C_{18}H_4Br_8N_2O_4$
Molecular weight or molecular weight range:	951.47 g/mol
Synonyms/Trade names:	SAYTEX BT93 1,2-bis(tetrabromophthalimido) ethane 2,2'-(1,2-ethandiyl)bis[4,5,6,7-tetrabromo-1h- isoindole-1,3(2h)-dione] BT-93W Ethyl Bis(Tetrabromophthalimide) SynaPro S93; 2,2'-ethane-1,2-diylbis(4,5,6,7- tetrabromo-1H-isoindole-1,3(2H)-dione) Ethylene bis(tetrabromophthalimide) EBTBP

Type of substance

🛛 Mono-constituent

□ Multi-constituent □ UVCB

Structural formula:



# 1.2 Similar substances/grouping possibilities

N.a.

# 2 CLASSIFICATION AND LABELLING

#### **2.1 Harmonised Classification in Annex VI of the CLP**

The substance is not not included in Annex VI of the CLP regulation.

# 2.2 Self classification

• In the registration:

Not classified.

• The following hazard classes are in addition notified among the aggregated self classifications in the C&L Inventory:

Not classified.

# 2.3 Proposal for Harmonised Classification in Annex VI of the CLP

No proposal available.

# **3 INFORMATION ON AGGREGATED TONNAGE AND USES**

From ECHA dissemination site						
🗌 1 – 10 tpa		🗌 10 – 100 tpa		🛛 100 – 1000 tpa		
🗌 1000 – 10,000 tpa		🗌 10,000 – 100,000 tpa		🗌 100,000 – 1,000,000 tpa		
□ 1,000,000 - 10,000,00	0 tpa	tpa 🗌 10,000,000 – 100,000,000 tpa			□ > 100,000,000 tpa	
□ <1 >+ tpa (e.g. 10+ ; 100+ ; 10,000+ tpa)			0,000+ tpa)	🗌 Confidential		
🛛 Industrial use	essional use	Consumer use		Closed System		
Information from disseminated page:						
Formulation flame retardant preparation Thermoplastic production (masterbatch and compound) Recycling Thermoplastic used in electronic and electrical component and electronic enclosures Thermoplastic used in construction and automotive Wire and cable used in automotive Coating used in textile backcoating Foam production for construction						
The substance is – among others – used in textile backcoating for fabrics, textiles and apparel. Though low release is stated there is wide dispersive use and consumer exposure cannot be excluded.						

## 4 OTHER COMPLETED/ONGOING REGULATORY PROCESSES THAT MAY AFFECT SUITABILITY FOR SUBSTANCE EVALUATION

Compliance check, Final decision	Dangerous substances Directive 67/548/EEC
Testing proposal	Existing Substances Regulation 793/93/EEC
Annex VI (CLP)	Plant Protection Products Regulation 91/414/EEC
Annex XV (SVHC)	Biocidal Products Directive 98/8/EEC ; Biocidal Product Regulation (Regulation (EU) 528/2012)
Annex XIV (Authorisation)	Other (provide further details below)
Annex XVII (Restriction)	

# 5 JUSTIFICATION FOR THE SELECTION OF THE CANDIDATE CORAP SUBSTANCE

#### 5.1 Legal basis for the proposal

- Article 44(2) (refined prioritisation criteria for substance evaluation)
- $\boxtimes$  Article 45(5) (Member State priority)

# 5.2 Selection criteria met (why the substance qualifies for being in CoRAP)

- □ Fulfils criteria as CMR/ Suspected CMR
- Fulfils criteria as Sensitiser/ Suspected sensitiser
- Fulfils criteria as potential endocrine disrupter
- Suspected PBT/vPvB / Suspected PBT/vPvB
- $\Box$  Fulfils criteria high (aggregated) tonnage (*tpa* > 1000)
- $\boxtimes$  Fulfils exposure criteria
- $\boxtimes$  Fulfils MS's (national) priorities

# 5.3 Initial grounds for concern to be clarified under Substance Evaluation

Hazard based concerns				
	Suspected $CMR^1$ $\Box C \Box M \Box R$	Potential endocrine disruptor		
Sensitiser	Suspected Sensitiser <sup>1</sup>			
□ PBT/vPvB	Suspected PBT/vPvB <sup>1</sup>	$oxed{tabular}$ Other (please specify below)		
Exposure/risk based concerns				
Vide dispersive use	🛛 Consumer use	Exposure of sensitive populations		
Exposure of environment	Exposure of environment 🛛 Exposure of workers			
High RCR High (aggregated) tonnage		Other (please specify below)		

#### 1. HH

The registration dossier does not provide sufficient information for the evaluation of sensitization, mutagenicity and fertility. The studies submitted for repeated dose toxicity were performed before international guidelines were available. Therefore the toxicity of the substance cannot be sufficiently evaluated and there is a potential risk as exposure of consumers is possible.

Based on the relatively large volume and wide dispersive use and the process categories named, there is also a significant potential for exposure of workers, both under production, handling and waste management.

#### 2. PBT

The substance is expected to adsorb strongly to soil and sediment and to be persistent based on screening test and very persistent based on modeling. There is a general lack of experimental data on the fate of the substance itself and especially its debromination products in the environment. Monitoring data, though scarce, also indicate that the substance is potentially mobile in the environment (<u>reported data from dissemination page</u>). The substance was detected in the receiving environment for leachate water from combined metal recycling and car dismantling factory.

 A standard bioaccumulation test has been performed, showing low values of bioaccumulation. Solubility is a challenge with this substance and factors such as high log Kow, large size and insolubility are put forward as indications that the substance will not bioaccumulate.

However EFSA (2012 http://www.efsa.europa.eu/en/efsajournal/doc/2908.pdf) considered the potential for accumulation to be high in mammals based on modeling.

#### 3. Wide dispersive use

According to the information on uses, both consumer use and professional use is possible. The substance is also included into or onto matrixes, for example in different plastics and on textiles. Several of the use descriptors relevant for wide dispersive use are listed in the reported data from dissemination page as for example PROC 5, PROC 10, PROC 13, ERC 8c, 8f, 10a and 11a.

<sup>&</sup>lt;u>CMR/Sensitiser</u>: known carcinogenic and/or mutagenic and/or reprotoxic properties/known sensitising properties (according to CLP harmonized or registrant self-classification or CLP Inventory) <u>Suspected CMR/Suspected sensitiser</u>: suspected carcinogenic and/or mutagenic and/or reprotoxic properties/suspected sensitising properties (not classified according to CLP harmonized or registrant self-classified according to CL

properties/suspected sensitising properties (not classified according to CLP harmonized or registrant selfclassification)

Suspected PBT: Potentially Persistent, Bioaccumulative and Toxic

# **5.4 Preliminary indication of information that may need to be requested to clarify the concern**

Information on toxicological properties	Information on physico-chemical properties		
Information on fate and behaviour	Information on exposure		
☐ Information on ecotoxicological properties	Information on uses		
Information ED potential	Other (provide further details below)		
-Initially, it is likely that information on sensitization, mutagenicity and fertility will be requested.			
- Further tests to investigate the environmental fate of the substance, its metabolites, and debromination products.			
Depending on the results of the tests and possible classification, further steps such as information on exposure might be required.			

# 5.5 Potential follow-up and link to risk management

Harmonised C&L	Restriction	Authorisation	Other (provide further details)
Due to insufficient inf on the potential follow		•	of the substance a statement