## Justification for the selection of a substance for CoRAP inclusion

**Substance Name (Public Name):** bis(pentane-2,4-dionato)calcium

**Chemical Group:** 

**EC Number:** 243-001-3

**CAS Number:** 19372-44-2

**Submitted by:** Germany

**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:	bis(pentane-2,4-dionato)calcium
IUPAC name:	calcium bis[(2Z)-4-oxopent-2-en-2-olate]
Index number in Annex VI of the CLP Regulation	N/A
Molecular formula:	$C_{10}H_{14}CaO_4$
Molecular weight or molecular weight range:	238.30 g·mol <sup>-1</sup>
Synonyms/Trade names:	Calcium acetylacetonate Calcium 2,4-pentanedionate Bis(pentane-2,4-dionato)calcium

Type of substance		☐ Multi-constituent	□ UVCB
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Structural formula:

#### **2 CLASSIFICATION AND LABELLING**

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

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

#### 2.2 Self classification

In the registration:

H302: Harmful if swallowed Acute Tox. 4 Acute Tox. 3 H311: Toxic in contact with skin
Acute Tox. 3 H331: Toxic if inhaled
Skin Sens. 1A H317: May cause an allergic skin reaction

Eye Dam. 1 H318: Causes serious eye damage

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

Acute Tox. 4 H332: Harmful if inhaled

Acute Tox. 4 H312: Harmful in contact with skin

Skin Irrit. 2

Eye Irrit. 2

H315: Causes skin irritation

H319: Causes serious eye irritation

Skin Sens. 1

H317: May cause an allergic skin reaction

H317: May cause respiratory irritation

H361(d): Suspected of damaging fertility.

H361(d): Suspected of damaging fertility or unborn child Repr. 2.

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

There is currently no proposal for harmonised classification registered or under consideration for this substance.

#### 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 <b>-</b> 100	),000 tpa	☐ 100,000 - 1,000,000 tpa	
□1,000,000 - 10,000,000 t	tpa	-100,000,000 tpa	□>100,000,000 tpa	
□<1>+ t	pa (e.g. 10+; 100+; 1	0,000+ tpa)	☐ Confidential	
	☐ Professional use	☐ Consumer use	e 🛛 Closed System	
Besides manufacture and formulation the only registered use of calcium acetylacetonate is as an additive (stabilizing agent) in polymer industry (e.g. rubber and plastic). Although relatively controlled conditions might be expected at industrial sites there are some open applications listed which potentially might lead to high exposures of workers.  No uses by professional workers are registered.				

# 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

□ Fulfils MS's (national) priorities

and regard and the property			
□ Article 44(2) (refined prioritisation criteria for substance evaluation)			
☐ Article 45(5) (MemberState priority)			
<b>5.2 Selection criteria met</b> (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			
☐ Fulfils criteria asPBT/vPvB/ Suspected PBT/vPvB			
$\boxtimes$ Fulfils criteria high (aggregated) tonnage ( $tpa>1000$ )			
☐ Fulfils exposure criteria			

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

Hazard based concerns				
CMR	Suspected CMR <sup>1</sup>		☐Potential endocrine disruptor	
□C□M□R	□C □M ⊠R	1		
Sensitiser	☐ Suspected Ser		_	
☐ PBT/vPvB	☐Suspected PBT	/vPvB <sup>1</sup>	⊠Other (please specify below)	
Exposure/risk based conce	erns			
☐ Wide dispersive use	☐ Consumer use		☐ Exposure of sensitive populations	
☐Exposure of environment	⊠Exposure of wo	orkers	☐ Cumulative exposure	
☐ High RCR	⊠High (aggregat	ed) tonnage	☐Other (please specify below)	
Calcium acetylacetonate can be used as a substitute for lead stabilizers in PVC. Therefore, it is important to assess the complete toxicological profile of the substance. Calcium acetylacetonate is self-classified as Skin Sens. 1A. Additional studies might be needed in order to analyze the potential for reproductive toxicity and to check the reported classification as Repr. 2 in the C&L inventory.  In view of the expected increasing importance of the substance as a substitute, worker exposure needs to be evaluated.				
5.4 Preliminary indication of information that may need to be requested to clarify the concern  ☐ Information on physico-chemical properties				
☐ Information on fate and behaviour		☐ Information on exposure		
☐ Information on ecotoxicological	al properties	☐ Information on uses		
☐ Information ED potential		☐ Other (provide further details below)		
Calcium acetylacetonate can be used as a substitute for lead stabilizers in PVC. Application of the read-across approach seems unclear. An initial review of the registration dossier indicates that additional studies for the end point reproductive toxicity might be needed.				
If the Substance Evaluation indicates that risks for workers arise further information on exposure might be necessary.				
5.5 Potential follow-up and link to risk management				
☐ Harmonised C&L ☐ Restr	ction	uthorisation	⊠Other (provide further details)	
It is unclear whether there is a risk for workers and further risk management measures need to be implemented.				

Suspected PBT: Potentially Persistent, Bioaccumulative and Toxic

<sup>&</sup>lt;sup>1</sup>CMR/Sensitiser: known carcinogenic and/or mutagenic and/or reprotoxic properties/known sensitising properties (according to CLP harmonized or registrant self-classification or CLP Inventory) Suspected CMR/Suspected sensitiser: suspected carcinogenic and/or mutagenic and/or reprotoxic properties/suspected sensitising properties (not classified according to CLP harmonized or registrant self-classification)