Justification for the selection of a substance for CoRAP inclusion

Substance Name (Public Name): 3-(4-tert-butylphenyl)propionaldehyde

Chemical Group:

EC Number: 242-016-2

CAS Number: 18127-01-0

Submitted by: Swedish Chemicals Agency

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:	3-(4-tert-butylphenyl)propionaldehyde
IUPAC name:	3-(4-tert-butylphenyl)propanal
Index number in Annex VI of the CLP Regulation	NA
Molecular formula:	C ₁₃ H ₁₈ O
Molecular weight or molecular weight range:	190.2814
Synonyms/Trade names:	Benzenepropanal, 4-(1,1-dimethylethyl)- Bourgeonal

Type of substance \square Mono-constituent \square Multi-constituent \square UVCB

Structural formula:

$$H_3C$$
 CH_3 CH_3

1.2 Similar substances/grouping possibilities

Table 2: Identity of similar substances

Public name (Synonym)	EC no	Index number in Annex VI to the CLP	Molecular formula	Molecular weight	Structural formula
3-p- cumenyl-2- methylpropio naldehyde (Cyclamal)	203-161-7	NA	C ₁₃ H _{18O}	190.2814	CH ₃
β-methyl-3- (1- methylethyl) benzeneprop anal (Florhydral)	412-050-4	605- 028-00- 2	C ₁₃ H ₁₈₀	190.28	
2-(4-tert- butylbenzyl) propionaldeh yde (Lysmeral)	201-289-8	NA	C ₁₄ H ₂₀₀	204.308	tBu

2 CLASSIFICATION AND LABELLING

2.1 Harmonised Classification in Annex VI of the CLP

NA

2.2 Self classification

• In the registration

Skin Irrit. 2 H315: Causes skin irritation

Skin Sens. 1B H317: May cause an allergic skin reaction

Repr. 2 H361: Suspected of damaging fertility or the unborn child

STOT RE H373: May cause damage to organs through prolonged or repeated

exposure

JUSTIFICATION DOCUMENT FOR THE SELECTION OF A CORAP SUBSTANCE

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

Acute Tox. 3 H301: Toxic if swallowed

Skin Sens. 1 H317: May cause an allergic skin reaction

Aquatic Chronic 2 H411: Toxic to aquatic life with long lasting effects

2.3 Proposal for Harmonised Classification in Annex VI of the CLP

None

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	☐ 10,000,000 - 100,000,000 tpa		☐ > 100,000,000 tpa		
□ <1 > +	tpa (e.	g. 10+ ; 100+ ; 10,000+ tpa)		☐ Confidential		
·						
☐ Industrial use ☐ Profe		essional use	□ Consumer use		☐ Closed System	
Bourgeonal is a fragrant and the fragranced end-products are used at industrial sites, by professional workers and by consumers.						

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							
$oxed{\boxtimes}$ Article 44(2) (refined prioritisation criteria for substance evaluation)							
☐ Article 45(5) (Member	☐ Article 45(5) (Member State priority)						
5.2 Selection criteria met (why the substance qualifies for being in CoRAP)							
☐ Fulfils criteria as CMR/	□ Fulfils criteria as CMR/ Suspected CMR						
☐ Fulfils criteria as Sensiti	☐ Fulfils criteria as Sensitiser/ Suspected sensitiser						
☐ Fulfils criteria as potenti	☐ Fulfils criteria as potential endocrine disrupter						
☐ Fulfils criteria as PBT/vPvB / Suspected PBT/vPvB							
\square Fulfils criteria high (agg	regated) tonnage (<i>tpa > 1000</i>)					
$oxed{\boxtimes}$ Fulfils exposure criteria	□ Fulfils exposure criteria						
☐ Fulfils MS's (national) p	riorities						
5.3 Initial grounds for concern to be clarified under Substance Evaluation							
Hazard based concerns							
CMR □C □M □R	Suspected CMR ¹ □C □M ⊠R	☐ Potential endocrine disruptor					
Sensitiser	☐ Suspected Sensitiser ¹						
☐ PBT/vPvB	☐ Suspected PBT/vPvB ¹	☐ Other (please specify below)					
Exposure/risk based concerns							
☐ Wide dispersive use	☐ Consumer use	☐ Exposure of sensitive populations					
☐ Exposure of environment	☐ Exposure of workers	☐ Cumulative exposure					
☐ High RCR	☐ High (aggregated) tonnage	☐ Other (please specify below)					
For reproductive toxicity endpoint, only one study carried out with bourgeonal is reported in the registration dossier. Based on testicular and epididymal toxicity observed in the 5 day oral study on sexually mature rats, the Registrant has self-classified bourgeonal for fertility effects under Repr. 2 category. By read-across to cyclamal a NOAEL of 25 mg/kg bw/day observed in one-							

generation study (OECD 415) is used for risk assessment of bourgeonal. In addition to adverse fertility effects a significant reduction in the anogenital distance of male pups was observed for

cyclamal.

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¹ <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-classification)
<u>Suspected PBT</u>: Potentially Persistent, Bioaccumulative and Toxic

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

☐ Information on toxicolog	gical properties	☐ Information o	☐ Information on physico-chemical properties		
☐ Information on fate and	behaviour	☐ Information o	☐ Information on exposure		
☐ Information on ecotoxic	ological properties	☐ Information o	☐ Information on uses		
☐ Information ED potentia	I	☐ Other (provide	☐ Other (provide further details below)		
Appropriate study to investigate developmental toxicity of bourgeonal and further information to discern the severity of fertility effects may be needed.					
5.5 Potential follow-up and link to risk management					
□ Harmonised C&I □	Restriction	Authorisation	Other (provide further details)		

Depending on the outcome of the evaluation, harmonised classification and labelling proposal

could be a potential follow-up.