Justification for the selection of a substance for CoRAP inclusion

Substance Name (Public Name):	3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl acrylate
Chemical Group:	
EC Number:	241-527-8
CAS Number:	17527-29-6
Submitted by:	Germany
Date:	17/03/2015

Note

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

Contents

1 IDENTITY OF THE SUBSTANCE

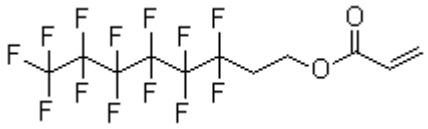
1.1 Other identifiers of the substance

Table 1: Substance identity

EC name:	3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl acrylate
IUPAC name:	3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl acrylate
Index number in Annex VI of the CLP Regulation	
Molecular formula:	$C_{11}H_7F_{13}O_2$
Molecular weight or molecular weight range:	418.1513 $g \cdot mol^{-1}$
Synonyms/Trade names:	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester 6:2 FTA

Type of substance ☒ Mono-constituent ☐ Multi-constituent ☐ UVCB

Structural formula:



1.2 Similar substances/grouping possibilities

None.

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:

  Not classified

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

  STOT SE 3 H335
  Skin Irrit. 2 H315
  Eye Irrit. 2 H319

2.3 Proposal for Harmonised Classification in Annex VI of the CLP

No proposal for harmonised classification is publically 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 – 10,000,000 tpa	☐ 10,000,000 – 100,000,000 tpa	☐ > 100,000,000 tpa	
☐ <1 . . . . . >+ tpa (e.g. 10+ ; 100+ ; 10,000+ tpa)		☐ Confidential	
☒ Industrial use	☐ Professional use	☐ Consumer use	☐ Closed System
The substance is used in industrial settings in the manufacture of polymers.			

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)

☐ 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

☒ Fulfils criteria as PBT/vPvB / Suspected PBT/vPvB

☐ Fulfils criteria high (aggregated) tonnage (*tpa > 1000*)

☒ Fulfils exposure criteria

☐ Fulfils MS's (national) priorities

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)

3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl acrylate (6:2 FtA) is an alternative for perfluorooctanoic acid (PFOA, C8-perfluorocarboxylic acid (C8-PFCA)) related substances, which have been proposed for restriction (Oct 2014), therefore increasing use and production of alternatives is expected. Thus, environmental exposure might increase in the future.

The intrinsic properties of 6:2 FtA may be of concern. 6:2 FtA is stated to be not readily biodegradable. Nevertheless, it is expected that perfluorohexanic acid (PFHxA) will be the final degradation product. Log P(OW) >4.5 indicates a potential for bioaccumulation. Bioconcentrations factors (BCFs) ≤ 34 are reported for 6:2 FtA, indicating no bioaccumulation. Fo the assessment of the bioaccumulation potential additional information (e.g. protein binding potential) may be required, since other mechanisms for bioaccumulation than log Kow and BCF are of relevance for these per- and polyfluorinated substances. No information on chronic toxicity are available.
In addition PFHxA is expected to have a high mobility in the environment, which also needs to be assessed, e.g. in terms of its potential for long-range transport.

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)

[1] 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)
Suspected PBT: Potentially Persistent, Bioaccumulative and Toxic

Uses, exposure, toxicological properties and ED potential were not targeted in the manual screening but might be part of the substance evaluation.

Based on a preliminary examination of the available data, information to assess the bioaccumulation potential and the ecotoxicity are required.

In detail, a test on long-term ecotoxicity of 6:2 FtA might be requested because of so far missing chronic data.

Additionally, a detailed evaluation of the available data may lead to further information requirements.

5.5 Potential follow-up and link to risk management

☒ Harmonised C&L	☒ Restriction	☒ Authorisation	☐ Other (provide further details)
Depending on the outcome of the substance evaluation, an analysis of Risk Management Options shall be carried out to identify appropriate risk management measures.			