# REACH

## **Cummins Alternator**

#### Introduction

According to Article 33 (Duty to communicate information on substances in articles) of the REACH regulation, "Any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0,1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance"

#### **Declaration of Use of Candidate List substances in Products**

Cummins works actively to avoid and phase out Prohibited Substances in its products. See more information on Prohibited Substances on the <u>Prohibited Substances</u> page at public.cummins.com.

Under REACH, an alternator is considered a complex object because it is made up of more than one article. On a complex object level, the alternator does not contain any Candidate List substance of a concentration above 0.1% by alternator weight. However, constituent articles (sub-components) may contain such concentrations.

This declaration covers sub-components for all variants of the alternator and reflects the most recent update of the REACH Candidate List before that date.

This declaration lists all Candidate List substances which could be found in concentrations above 0.1% by weight in sub-components. The identified parts are listed by part number, name and information on where to find those parts in the engine, and a reference to the contained substance(s).

### **Changes from Previous Issue**

No previous issue.

#### Identified Candidate List Substances Contained in Alternator

Su	bstance					
	ID	Name (en-GB)	Name (en-GB)	CAS Number	EC Number	Date of Inclusion *
	А	Lead	Lead	7439-92-1	231-100-4	27/06/2018
		Imidazolidine-2-thione (2-imidazoline-	Imidazolidine-2-thione (2-imidazoline-			
	В	2-thiol	2-thiol	96-45-7	202-506-9	16/12/2013
	С	N,N-dimethylacetamide	N,N-dimethylacetamide	127-19-5	204-826-4	19/12/2011
	D	Cobalt(II) Sulphate	Cobalt(II) Sulphate	10124-43-3	233-334-2	15/12/201

#### **Identified Sub-Components Contained in Alternator**

Substance concentration of 0.1% by weight is exceeded in the parts and/or components denoted using curved brackets (e.g. {Flange bearing 3850-0134477-000 (285888916)}). Cummins Part numbers are provided as a unique identifier for that component and are identified using parentheses inside the curved brackets.

ID	Path to Sub-Parts Containing Substances	Substance ID
1	[Alternator 22SI 12V 130A] [SRE Frame & Stator ASM P] [Rectifier Bridge ASM] {Flex Diode 60A LV (C/C; Positive); Remy (10511355)}	
2	[Alternator 22SI 12V 130A] [SRE Frame & Stator ASM P] [Rectifier Bridge ASM] {Flex Diode 60A LV (C/C; Negative); Remy (10511356)}	
3	3 [Alternator 22SI 12V 130A] [SRE Frame & Stator ASM P] {10A4G-F Axial Diode (10A6S)}	
4	[Alternator 22SI 12V 130A] [SRE Frame & Stator ASM P] [Regulator Specification] {substrate assy (CR392-443_1)}	
5	[Alternator 22SI 12V 130A] {Stick Screw (10488604)}	
6	[Alternator 22SI 12V 130A] {Cap (1970227)}	В
7	[Alternator 22SE 12V 130A] [SRE FRAME & STATOR ASM P] [Stator ASM] [LAM & Winding ASM] {Paper-Aramid (M2444-007)}	
8	[Alternator 22SE 12V 130A] [SRE FRAME & STATOR ASM P] {Screw ASM (10475784)}	D

### Information on Safe Use of the Substance(s) in the Sub-Components

In general, the Cummins Engine manual provides information on the safe handling of Cummins' aftertreatments. If available to Cummins, specific REACH Art. 33 information on the safe use of sub-components can be found here:

ID	Information on Safe Use
	No Information Available