

Cummins Generator Technologies Alternators

Introduction

According to Article 33 of the EU Regulation No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (Duty to communicate information on substances in articles) *“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 Generator Technologies (CGT) works actively to identify, reduce and, where appropriate, eliminate substances noted on the Candidate List of Substances of Very High Concern present in its products. See more information on such substances and their use on [Cummins website](#).

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 overall Alternator weight. However, constituent articles (sub-components) may contain such concentrations.

This declaration covers Candidate List substances which could be found in concentrations above 0.1% by weight in sub-components for all variants of the Alternator and reflects the updated Candidate List as of 03 July 2020. The identified parts are listed by type, description and information on where to find those parts in the Alternator, and a reference to the contained substance(s).

In general, the CGT Alternator manual provides information on the safe handling of CGT Alternators.

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Identified Candidate List Substances Contained in Alternator

Substance ID	Name (en-GB)	Name (en-GB)	CAS Number	EC Number	Date of inclusion
A	Lead	Lead	7439-92-1	231-100-4	27/06/2018
B	Diboron Trioxide	Diboron Trioxide	1303-86-2	215-125-8	18/06/2012
C	Lead titanium trioxide	Lead titanium trioxide	12060-00-3	235-038-9	19/12/2012
D	Lead monoxide (lead oxide)	Lead monoxide (lead oxide)	1317-36-8	215-267-0	19/12/2012
E	bis(2-ethylhexyl) phthalate (DEHP)	bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	204-211-0	17/02/2011

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Identified Sub-Components Contained in Alternator

Substance concentration of 0.1% by weight may be exceeded in the parts and/or components detailed below.

As the CGT Alternator is a complex object configured to specific customer requirements at time of order, not all the components listed below may be present in a particular alternator.

ID	Component Parts Containing Substances	Substance ID
1	Rotor steel shafts and hubs	A
2	Stator steel landing bars	A
3	Alternator fabricated steel frame	A
4	Alternator steel feet (where separate to alternator frame)	A
5	Alternator steel air inlet and outlet screens	A
6	Non-Drive End Fabricated steel end shields	A
7	Drive End Fabricated steel end shields	A
8	Single bearing alternator coupling discs	A
9	Non-drive end PMG and shaft-end covers	A
10	Steel terminal box panels and lids	A
11	Steel fasteners and hardware	A
12	Aluminium rotor fans	A
13	Aluminium Drive-End Brackets	A
14	Aluminium Non-drive End Brackets	A
15	Aluminium Cable Gland Plates	A
16	Aluminium Rectifier Fins on rotating exciter rotors	A

17	Aluminium rotor wedges	A
18	White metal babbitts in sleeve bearings	A
19	Solder in electronic control assemblies	A
20	Solder in rectifier diodes	A
21	Solder in solder crimp joints of main stator output leads (where used)	A
22	Aluminium plates, labels and markers	A
23	Aluminium damper bars and laminations	A
24	Fibre-glass pultrusions in stator slot wedges and closures	B
25	Fibre-glass pultrusions used in cable routing guides within terminal boxes	B
26	Heating elements of Space heaters	C
27	Thermistor elements	D
28	Insulators of electronic components within control assemblies	D
29	Rubber Grommets	E
30	Rubber O-Rings	E
31	Rubber Sealing strips	E
30	Neoprene gaskets	E