Cummins Sensors

Introduction

According to Article 33 (Duty to communicate information on substances in articles) of the REACH regulation, EU REACH Regulation 1907/2006 (and UK equivalent), "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, a sensor is considered a complex object because it is made up of more than one article. On a complex object level, the sensor does not contain any Candidate List substance of a concentration above 0.1% by article weight. However, constituent articles (sub-components) may contain such concentrations.

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

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 sensor, and a reference to the contained substance(s).

Change Log

Issue 1: Initial release. Dated 5-2-23. Issue 2: Added SVHC Bis(α , α -dimethylbenzyl) peroxide (CAS No: 80-43-3) Dated 8-14-2024

Substance ID	Name (en-GB)	CAS Number	EC Number	Date of Inclusion
А	Lead	7439-92-1	231-100-4	27/06/2018
В	Lead-Monoxide	1317-36-8	215-267-0	19/12/2012
С	Diboron trioxide	1303-86-2	215-125-8	18/6/2012
D	2,2',6,6'-tetrabromo-4,4'- isopropylidenediphenol (TBBA)	79-94-7	201-236-9	17/1/2023
E	Bis(α,α-dimethylbenzyl) peroxide	80-43-3	201-279-3	27/06/2024

Identified Candidate List Substances Contained in Sensors

Identified Sub-Components Contained in Sensors

Substance concentration of 0.1% by weight could be 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	[Sensor, Oxygen] [ELE. Conn. Adapter] {Term M M/P 150 AU Sealed Tang (05-01154)}	А
2	[Sensor, Oxygen] [Oxygen Sensor] [Wire Harness 943 +/-7] {Terminal, Gold (6002LM0091)}	А
3	[Sensor, Temperature] {Housing (401-511-00)}	А
4	[Sensor, Temperature] [Term. Ins./Therm. Asm. 914-126-01] [Therm./Term. Asm. 916-251-01] {Thermistor/Lead Asm. 803-119-02 (803-119-02)}	А
5	[Sensor, soot] [particulate matter probe / Partikelsonde EGS-PM2.1] [Cummins_US] [Det_B+] [SCU] {SCU_EMPS_44; Printed circuit board/Leiterplatte (4384480A054P727)}	А
6	[Sensor, Particulate 1000MM] [SCU] [SCU_EMPS_66] {Printed circuit board/Leiterplatte (A056N723)}	А
7	[Sensor] [pressure temp sensor TMAP C15] [resistor carrier] [NTC Thermistor] {Soldering (B57891S1202A353)}	А
8	[Sensor] [High Pressure Sensor / Hochdrucksensor / DS-RPS4-18] {Electronic part (5297640)}	А
9	[Sensor Pressure] {Pin (5461969)}	A
10	[Sensor, Knock] {Carrier 18 mm (A2C53160853)}	A

ID	Path to Sub-Parts Containing Substances	Substance ID
11	[Sensor, Knock] {Nut Mn (A2C53158952)}	А
12	[Sensor, Nitrogen Oxide] [NOx SNS142] [NOS B6] [Cable harness Nox-Gen3 incl. Sub Assy oil NOSB6] [Modul -Ara-housing cpl. assembled NOSB6] [Module- Housing with the contact carrier] [Module-Contact bases splash NOX Sensor ag] {ept Kontaktband - Wickelrichtung rechts" (1190010701 & 1190010702)}	A
13	[Sensor, Nitrogen Oxide] [NOx SNS142] [housing / Gehäuse Cod.B grey] {contact couple / Kontaktpaar (37 9330 0210 99 505)}	А
14	[Sensor, Nitrogen Oxide] [NOx SNS142] [housing / Gehäuse Cod.B grey] {contact couple / Kontaktpaar (37 9330 0310 99 505)}	А
15	[Sensor, Restriction] {Push Plate (1553-08)}	А
16	[Sensor, Water] {SK-3 housing; Pin (AT5.07.90044.00.01)}	А
17	[Sensor, Temperature] [ERT Sensor 97211] {Thermistor (TH05250A)}	В
18	[Sensor] [pressure temp sensor TMAP C15] [CAP,100nf,50V,+/- 10%,X7R,0805] {Ag/PbO Termination (A2C00060059)}	В
19	[Sensor Water in Fuel] [WIF Sensor] [WID Assembly with 82K Resistor] {Resistor_RM06FTN1201 (3014222)}	В
20	[Sensor, Oxygen] [Oxygen Sensor] [Oxygen Sensor] {Sealing Disc (1250113101)}	С
21	[Sensor, Oxygen] [Oxygen Sensor] {Wire Harness 943 +/-7] {Insulating Sleeve (1257034733)}	С
22	[Sensor, soot] [particulate matter probe / Partikelsonde EGS-PM2.1] [Cummins_US] [Det_B+] {housing / sensor EGS-PM2/BN_SE077_ with Retaining Screw 004 P4.5,1257021814,822 (4384480A054P727)}	С
23	[Sensor, Particulate 1000MM] {housing / sensor EGS-PM2/BN_SE0126 with Retaining Screw 004 P4.5,1257021840 (A056N723)}	С
24	[Sensor Assy, Exhaust Gas Temperature] {Tube, Holder (A065D658)}	C
25	[Sensor Assy, Exhaust Gas Temperature] {Tube, Holder (A065D659)}	C
26	[Sensor, Exhaust Gas Temperature] {Filler (5654076)}	C
27	[Sensor, Exhaust Gas Temperature] {Tube, Holder (5654076)}	C
28	[Sensor, soot] [particulate matter probe / Partikelsonde EGS-PM2.1] [Cummins_US] [Det_B+] [SCU] {SCU_EMPS_44; Printed circuit board/Leiterplatte (4384480A054P727)}	D
29	[Sensor] [Module Pressure Sensing] [Hose Formed] {(A064R0270)}	E
30	[Sensor] [Temperature Sensor] [Gasket] {(53-09-52-084-28-B)}	E

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' engines and components. If available to Cummins, specific REACH Article 33 information on the safe use of sub-components can be found here:

ID	Information on Safe Use
	No Information Available