

Cummins Engines

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 [Prohibited Substances](#) page at public.cummins.com.

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

This declaration covers sub-components for all variants of the engine 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 Engine

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	Cobalt(II) sulphate	Cobalt(II) sulphate	10124-43-3	233-334-2	15/12/2010
E	Lead monoxide (lead oxide)	Lead monoxide (lead oxide)	1317-36-8	215-267-0	19/12/2012
F	Cadmium	Cadmium	7440-43-9	231-152-8	20/06/2013
G	Boric acid	Boric acid	10043-35-3	233-139-2	18/06/2010

REACH

Identified Sub-Components Contained in Engine

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 Node 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	[Engine][Block, Cylinder] {Flange bearing 3850-0134477-000 (285888916)}	A
2	[Engine] [Block, Cylinder] {Bearing, Main (453999358)}	A
3	[Engine] [Block, Cylinder] {Plug, Threaded (160926965)}	A
4	[Engine] [Block, Cylinder] {Plug, Threaded M14 x 1,5 (743007023)}	A
5	[Engine] [Block, Cylinder] {Plug, Threaded M10 x 1 (469221560)}	A
6	[Engine] [Block, Cylinder] {18mm x 10mm Hwl / Dwl Pin L/C Dec Plain (87602431)}	A
7	[Engine] [Block, Cylinder] {16.052mm x 10mm Hwl/Dwl Pin L/C Dec Plain (496940469)}	A
8	[Engine] [Block, Cylinder] {Bushing, camshaft (756794397)}	A
9	[Engine] [Aid, COO Heater Starting] [5309425 750W - 120V "B" 3/4" NPTF] [ASMD 750W - 120v 5.750 .031 cu] {3/4" NPT H.D. EL Adapter (442267490)}	A
10	[Engine] [Damper, Vibration] {M6 x 24mm Dowel Pin (511539173)}	A
11	[Engine] [Thermostat] [Thermostat Assembly] {Thermal Element Assembly (237048418)}	A
12	[Engine] [Recirculation, Exhaust] [Sensor, Pressure] {Electronics Module Assembly (767779016)}	A
13	[Engine] [Recirculation, Exhaust] [Sensor, Pressure] [Electronics Module Assembly] {Resistor (767779016)}	A
14	[Engine] [Recirculation, Exhaust] [Cummins EGR Valve Nighthawk] [Cover Assembly] [Stem Guide] {Bushing Assembly (598849897)}	A
15	[Engine] [Location, Fuel Filter] [Module Liquid Filtration] [Module, Liquid Filtration] [Module, Liquid Filtration] [MY2019 Housing Assembly] {Diesel Fuel Heater Probe}	A

16	[Engine] [Location, Fuel Filter] [Module Liquid Filtration] [Module, Liquid Filtration] [Module, Liquid Filtration] [MY2019 Housing Assembly] {Insert, SPIROL (753987645)}	A
17	[Engine] [Pump, Fuel] {Support, Fuel Pump (764988363)}	A
18	[Engine] [Pump, Fuel] [Pump, Fuel] [Assembly housing] {Bushing (763065953)}	A
19	[Engine] [Pump, Fuel] [Pump, Fuel] [Assembly Flange] {Headed Bush (763065953)}	A
20	[Engine] [Pump, Fuel] [Pump, Fuel] [Metering Unit] [Assembly magnetic housing] {Bushing (763065953)}	A
21	[Engine] [Pump, Fuel] [Pump, Fuel] [Metering Unit] {Assembly Armature and additional parts (763065953)}	A
22	[Engine] [Pump, Fuel] [Pump, Fuel] {Gear Pump (763065953)}	A
23	[Engine] [Plumbing, Fuel] [Connector, QCK Disconnect with O Ring] {Connector, Quick Disconnect (477855053)}	A
24	[Engine] [Plumbing, Cabin Heater] {Coupling, Plain Hose (484383826)}	A
25	[Engine] [Connection, Air Intake] [ACV 80mm SST Dragon CC] {ACT Housing (723163562)}	A
26	[Engine] [Connection, Air Intake] [ACV 80mm SST Dragon CC] [Motor] {Spacer (723163562)}	A
27	[Engine] [Connection, Air Intake] [ACV 80mm SST Dragon CC] [Motor] {SLEEVE (723163562)}	A
28	[Engine] [Connection, Air Intake] [ACV 80mm SST Dragon CC] [Motor] {SHAFT (723163562)}	A
29	[Engine] [Connection, Air Intake] [ACV 80mm SST Dragon CC] [Motor] {Busing Housing (723163562)}	A
30	[Engine] [Cooler, Engine Oil] [Relief Valve] {Valve Body (88139070)}	A
31	[Engine] [Cooler, Engine Oil] {Plunger, PRS Regulator (80489272)}	A
32	[Engine] [Cooler, Engine Oil] [Head, Lube Oil Filter Assembly] {Head Lube Oil Filter (759500964)}	A
33	[Engine] [Module, Engine Control] [pressure Sensor TMAP C15] [Resistor Carrier] [NTC] {NTC Thermistor (711804866)}	A
34	[Engine] [Module, Engine Control] [ECU FMR CM2450B03-PV2 HW CUM] [module assy FMR CM2450B] {REC019 pcb botMAN FMR CM2450B03 (753597123)}	A

35	[Engine] [Module, Engine Control] [ECU FMR CM2450B03-PV2 HW CUM] [Module Assy FMR CM2450B] [REC019 pcb botMAN FMR CM2450B03] [FET/NVTFSS5826NL&SQ7414AENW,PPAK_3x3_] {Power MOSFET 60V 20A 24mOhm Single N-Channel u8FL Logic Level (753597123)}	A
36	[Engine] [Module, Engine Control] [ECU FMR CM2450B03-PV2 HW CUM] [Module Assy FMR CM2450B] [REC019 pcb botMAN FMR CM2450B03] [r jump, 0r05, 100Mw,1a,0603] {koa Resistor (753597123)}	A
37	[Engine] [Module, Engine Control] [ECU FMR CM2450B03-PV2 HW CUM] [Module Assy FMR CM2450B] [REC019 pcb botMAN FMR CM2450B03] [R LIN,2K,1%,TK100,250mW,1206] {KOA Resistor (753597123)}	A
38	[Engine] [Module, Engine Control] [ECU FMR CM2450B03-PV2 HW CUM] [Module Assy FMR CM2450B] [REC019 pcb botMAN FMR CM2450B03] [R LIN,2K,1%,TK100,250mW,1206] {KOA Resistor (753597123)}	A
39	[Engine] [Module, Engine Control] [ECU FMR CM2450B03-PV2 HW CUM] [Module Assy FMR CM2450B] [REC019 pcb botMAN FMR CM2450B03] [R LIN,3K,1%,TK100,750mW,0612,SMD] {KOA Resistor (753597123)}	A
40	[Engine] [Module, Engine Control] [ECU FMR CM2450B03-PV2 HW CUM] [Module Assy FMR CM2450B] [REC019 pcb botMAN FMR CM2450B03] [R LIN,10K,1%,TK100,250mW,1206] {KOA Resistor (753597123)}	A
41	[Engine] [Module, Engine Control] [ECU FMR CM2450B03-PV2 HW CUM] [Module Assy FMR CM2450B] [REC019 pcb botMAN FMR CM2450B03] [R LIN,10K,1%,TK100,250mW,1206] {KOA Resistor (753597123)}	A
42	[Engine] [Module, Engine Control] [ECU FMR CM2450B03-PV2 HW CUM] [Module Assy FMR CM2450B] [REC019 pcb botMAN FMR CM2450B03] [REC019_Carrier 00000A2C7504990800] {272.5g PCB Standard - lead-free - 8e (753597123)}	A
43	[Engine] [Module, Engine Control] [ECU FMR CM2450B03-PV2 HW CUM] [Module Assy FMR CM2450B] [REC019 pcb botMAN FMR CM2450B03] [REC019_Carrier 00000A2C7504990800] {272.5g PCB Standard - lead-free - 8e (753597123)}	A
44	[Engine] [Module, Engine Control] [Temp. Sensor] {Brass Housing 401-592-00 (735917227)}	A
45	[Engine] [Module, Engine Control] [Temp. Sensor] {Thermistor assy 803-147-02 (735917227)}	A
46	[Engine] [Turbocharger] [ID21 Turbocharger HE300VG V03] [ID17 Turbocharger HE300VG V02] [Actuator-Tur_Electric] [Lysander 12V w/out Port Actuator] {Housing (w/o Port) (765075544)}	A
47	[Engine] [Turbocharger] [ID21 Turbocharger HE300VG V03] [ID17 Turbocharger HE300VG V02] [Actuator-Tur_Electric] [Lysander 12V w/out Port Actuator] {DP4 Bearing (765075544)}	A

48	[Engine] [Turbocharge] [ID21 Turbocharger HE300VG V03] [ID17 Turbocharger HE300VG V02] [Turbocharger] [Housing Compressor Permanent Assembly] {Housing Compressor (686997826)}	A
49	[Engine] [Turbocharger] [ID21 Turbocharger HE300VG V03] [ID17 Turbocharger HE300VG V02] [Turbocharger] [Housing Compressor Permanent Assembly] {Baffle Turbocharger Noise (686997826)}	A
50	[Engine] [Turbocharger] [ID21 Turbocharger HE300VG V03] [ID17 Turbocharger HE300VG V02] [Turbocharger] [Core-Turbocharger] {Bearing TUR THRUST (546304019)}	A
51	[Engine] [Turbocharger] [ID21 Turbocharger HE300VG V03] [ID17 Turbocharger HE300VG V02] [Speed Sensor] {VR Sensor System (697449409)}	A
52	[Engine] [Turbocharger] [ID21 Turbocharger HE300VG V03] [ID17 Turbocharger HE300VG V02] {Speed Sensor (697449409)}	A
53	[Engine] [Plumbing, Injector] [Connector, INJ Fuel Supply] {Edge-Type Filter / Stabfilter (761607145)}	A
54	[Engine] [Plumbing, Injector] [Common Rail] {Pressure Regulating Valve PCV3-20K (687819985)}	A
55	[Engine] [Plumbing, Injector] [Common Rail] [HIGH PRESSURE SENSOR] {Electronical Parts (687819985)}	A
56	[Engine] [Piston, Engine] [Connecting Rod - Assembly] {Bushing - CONN ROD (695584822)}	A
57	[Engine] [Piston, Engine] {Bearing, Connecting Rod (759308918)}	A
58	[Engine] [Piston, Engine] [Piston Cooling Nozzle] {Steel Bushing (293474809)}	A
59	[Engine] [Injector] [CRIN - Common Rail Injector] {Magnetgruppe (764124371)}	A
60	[Engine] [Injector] [CRIN - Common Rail Injector] {Kleinteile (764124371)}	A
61	[Engine] [Lever, Rocker] [Rocker Lever Housing Assy] [Rocker Lever Housing Assy] {Rocker Lever House (755591657)}	A
62	[Engine] [Vent, Engine Coolant] [Reducing Pipe Adapter] {Adapter Reducing Pipe (159535912)}	A
63	[Engine] [Motor Starting] [Starter Motor] {Frame, Starter End (699204657)}	A
64	[Engine] [Motor Starting] [Starter Motor] [Clutch Assy, W/Housing] [Switch Assy, Magnetic] {Case, Bearing, Center (699204657)}	A

65	[Engine] [Motor Starting] [Starter Motor] [Clutch Assy, W/Housing] [Housing Assy, Starter] {Bush, Starter Housing (699204657)}	A
66	[Engine] [Motor Starting] [Starter Motor] [Clutch Assy, W/Housing] [Housing Assy, Starter] {Housing, Starter (699204657)}	A
67	[Engine] [Plumbing, Turbocharger] [Connector Female] {Connector, Female (623922369)}	A
68	[Engine] [Arrangement, Valve Cover] [Gasket -Integrated Wiring] [Pin Pack Assembly] {Captive Nut M4x0.7mm (620363044)}	A
69	[Engine] [Pump, Water] [Water Pump] {Corpo Pompa (756969411)}	A
70	[Engine] [Pump, Water] [Water Pump] [Plastic Impeller] {Bushing (756969411)}	A
71	[Engine] [Harness, Etr Mdl Cnt Wrg] [THUNDERBOLT] [ASM MOUN BRACKET HARN] {MOUN COLLAR (755764083)}	A
72	[Engine] [Harness, Etr Mdl Cnt Wrg] [THUNDERBOLT] {Term F W/P SN Sealed Tang (755764083)}	A
73	[Engine] [Plumbing, Exh Rcn Air] [Tube, Air Transfer] [Insulation, Tube] {Vitritherm Fiberglass (531722075)}	B
74	[Engine] [Location, Fuel Filter] [Module, Liquid Filtration] [Module, Liquid Filtration] [MY2019 Housing Assembly] [Diesel Fuel Heater Probe / Pocketheizer A 055L 068] {PTC Heating Element/Heizelement (753987645)}	C
75	[Engine] [Module, Engine Control] [ECU FMR CM2450B03-PV2 HW CUM] [module assy FMR CM2450B] {pan head screw (753597123)}	D
76	[Engine] [Harness, Etr Mdl Cnt Wrg] [THUNDERBOLT] {ASM MOUN CLAMP CDT BLK M8 (755764083)}	D
77	[Engine] [Recirculation, Exhaust] [MAF M-P13] [Housing Unit Assy] {Housing Assy (584293082)}	E
78	[Engine] [Recirculation, Exhaust] [Sensor, Pressure] [CSE] {Glass Sealing & Rods (767779016)}	E
79	[Engine] [Recirculation, Exhaust] [Sensor, Temperature] [ERT Sensor 97211] {Thermistor (768806329)}	E
80	[Engine] [Module, Engine Control] [5024-0717 TempSen (0310)] {Thermistor (Shibaura: U1-312-S7)}	E
81	[Engine] [Module, Engine Control] {Pressure Sensor TMAP C15 (711804866)}	E
82	[Engine] [module, Engine Control] {Sensor, PRS Temperature (711816416)}	E
83	[Engine] [Turbocharger] [ID21 Turbocharger HE300VG V02] [Speed Sensor] {cable harness (697449409)}	F
84	[Engine] [Plumbing, Injector] {M8 x 1.25 6g x 45mm HEX FLANGE HEAD SCREW (765649849)}	G

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. 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