

Cummins Engine

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 [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 article 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.

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).

Change Log

Issue 1: Initial release.

Issue 2: Added “Cobalt(II) dinitrate” and “Melamine”.

Changed text from “is” to “could be” in Identified Sub-Components Contained in Alternator section.

Dated 09-29-23.

Issue 3: Added “Bumetrizole”.

Dated 02-12-2024

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Issue 4: Added SVHC Triphenyl phosphate (CAS No: 115-86-6) and O,O,O-triphenyl phosphorothioate (CAS No: 597-82-0).
Dated 2-28-25.

Identified Candidate List Substances Contained in Engine

Substance ID	Name (en-GB)	CAS Number	EC Number	Date of Inclusion
A	Lead	7439-92-1	231-100-4	27/06/2018
B	Cobalt(II) dinitrate	10141-05-6	233-402-1	15/12/2010
C	Melamine	108-78-1	203-615-4	17/01/2023
D	Diboron trioxide	1303-86-2	215-125-8	18/06/2012
E	Lead titanium trioxide	12060-00-3	235-038-9	19/12/2012
F	Cobalt(II) sulphate	10124-43-3	233-334-2	15/12/2010
G	Lead monoxide (lead oxide)	1317-36-8	215-267-0	19/12/2012
H	Cadmium	7440-43-9	231-152-8	20/06/2013
J	Boric acid	10043-35-3	233-139-2	18/06/2010
K	Bumetrizole	3896-11-5	223-445-4	23/01/2024
L	Triphenyl phosphate	115-86-6	204-112-2	07/11/2024
M	O,O,O-triphenyl phosphorothioate	597-82-0	209-909-9	21/01/2025

Identified Sub-Components Contained in Engine

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	[Engine] [MQS 1.5] [Socket Contact] {Clean Body (P00009907)}	A
2	[Engine] {TERMINAL (300006520)}	A
3	[Engine] {TERM F W/P SN SEALED TANG (3613338)}	A
4	[Engine] [Plumbing, Exh Rcn Water] {Coupling, Plain Hose (4942109)}	A
5	[Engine] [ARRANGEMENT, OIL FILL] {Connection, Adapter (3965712)}	A
6	[Engine] [Plumbing, Exh Rcn Water] {COUPLING, PLAIN HOSE (4941864)}	A

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ID	Path to Sub-Parts Containing Substances	Substance ID
7	[Engine] [Plumbing, Exh Rcn Air] [Temperature Sensor] [Term./Insulator/Therm Assy. 914-163-01] [Therm. / Term. Asm. 916-260-01] {NTC Glass-encaps. Sensor (803-123-02)}	A
8	[Engine] [Plumbing, Exh Rcn Air] [Temperature Sensor] [Term./Insulator/Therm Assy. 914-163-01] [Therm. / Term. Asm. 916-260-01] [NTC Glass-encaps. Sensor] {Glass Tube LG-16 2,1*1,3*5,0 (C61063A2913C10)}	A
9	[Engine] [Gauge, Oil Level] {Fitting, Tube (3969068)}	A
10	[Engine] {Main bearing_BC-1115-I-STD (3944153)}	A
11	[Engine] {Main bearing_BC-1065-S-STD (3944163)}	A
12	[Engine] {Main bearing_BC-1115-S-STD (3944158)}	A
13	[Engine] {Camshaft Bushing-Ec-430-U (394532)}	A
14	[Engine] [Pump, Fuel] {Radial Piston Pump; CR/CP3HS3/L110/30-78 (5592045)}	A
15	[Engine] [INJECTOR] [CONNECTOR, INJ FUEL SUPPLY] {EDGE-TYPE FILTER / STABFILTER (F00ZF20001)}	A
16	[Engine] [PLUMBING, TURBOCHARGE HOSE, FLEXIBLE] [Nipple Assembly] {Nipple (FC1802-0606S)}	A
17	[Engine] [PLUMBING, TURBOCHARGE HOSE, FLEXIBLE] [Nipple Assembly] {Nipple (FW1161-0606S)}	A
18	[Engine] [BLOCK, CYLINDER] {Main bearing upper 3850-20100211-001 (5344833)}	A
19	[Engine] [BLOCK, CYLINDER] {Main bearing lower 3850-20100224-001 (5344834)}	A
20	[Engine] [Block, Cylinder] [Plug, Threaded] {Plug, Threaded (3678873)}	A
21	[Engine] [Plumbing, Cabin Heater] [Coupling, Plain Hose] {Coupling, Plain Hose (4937137)}	A
22	[Engine] [Male Elbow Assembly] {Body (VS269AB-10-8B)}	A
23	[Engine] [Male Elbow Assembly] {Sleeve (60AB-10)}	A
24	[Engine] [Male Elbow Assembly] {Nut (61AB-10)}	A
25	[Engine] [Block, Cylinder] {16.052mm x 10mm Hwl/Dwl Pin L/C Dec Plain (3902343)}	A
26	[Engine] [Breather Crankcase] [Plain Hose Coupling] {Coupling, Plain Hose (C-4932701)}	A
27	[Engine] [Plumbing, Turbocharger Oil] [Connector, Male] {Connector, Male (4940183)}	A
28	[Engine] [Plumbing, Cpr Coolant] [CONNECTOR, QCK DISCONNECT] {Adaptor NG12-M16x1,5 (555846065800)}	A
29	[Engine] [BLOCK, CYLINDE] {BEARING MAIN (4946030)}	A
30	[Engine] [BLOCK, CYLINDE] {BEARING, CRANKSHAFT THRUST (4946031)}	A

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ID	Path to Sub-Parts Containing Substances	Substance ID
31	[Engine] [BLOCK, CYLINDE] {BEARING MAIN (4996250)}	A
32	[Engine] [THERMOSTAT] [THERMOSTAT] {Jiggle valve (CUC-031)}	A
33	[Engine] [THERMOSTAT] [THERMOSTAT] {Stem (CUC-013)}	A
34	[Engine] [Oil Pan] [Oil Pan] {M22X1.5-6g Square Socket Drain Plug (3282266)}	A
35	[Engine] [Motor, Starting] [Motor 39MT 24V] [IMS Outline] [IMS ASM] {SCREW (10541642)}	B
36	[Engine] [Motor, Starting] [Motor 39MT 24V] [IMS Outline] [IMS ASM] {STOP (10541643)}	B
37	[Engine] [HOUSING, REAR GEAR] {Screw, Hex Flange Head Cap (3901445)}	C
38	[Engine] [HOUSING, FLYWHEEL] {Screw, Hex Flange Head Cap (3089316)}	C
39	[Engine] [COVER, FRONT GEAR] {Screw, Hex Flange Head Cap (3901445)}	C
40	[Engine] [COOLER, ENGINE OIL] {Screw, Hex Flange Head Cap (3901445)}	C
41	[Engine] [MOUNTING, LIFTING BRACKET] {Screw, Hex Flange Head Cap (3903990)}	C
42	[Engine] [BLOCK, CYLINDER] {16.052mm x 10mm Hwl/Dwl Pin L/C Dec Plain (3902343)}	C
43	[Engine] [Recirculation, Exhaust] [12CP56-2 (APT) (0611)] {CSE>Glass (sealing & rods) (27501-88MC)}	D
44	[Engine] [Filter, Fuel] [Fuel Filter] [SEAHAWK FUEL FILTER (FH21130ELRX)] [SEAHAWK FUEL FILTER MODULE] [MY10 HOUSING ASSEMBLY] [MY2013 Housing Assy] [Diesel Fuel Heater / Pocketheizer] {PTC heating element/Heizelement (6039744.01)}	E
45	[Engine] [Module, Engine Control] [ECU CM2350B07R2 CUM] [module assy FMR CM2350B07R1] [pan head screw 6-32 x 17.44] {6-32 X .686 TXP PH W/ AUTOSERT FEATURE T/T (A0344185M06)}	F
46	[Engine] [Recirculation, Exhaust] [5024-0717 TempSen(0310)] {Thermistor (Shibaura: U1-312-S7) (77064-1)}	G
47	[Engine] [Recirculation, Exhaust] [5024-0717 TempSen(0310)] [Connector Framatone Bkey W/2] {Resistor (4004698500D)}	G
48	[Engine] [Module, Engine Control] [pressure temp sensor TMAP C15] [CAP,100nf,50V,+/-10%,X7R,0805] {Ag/PbO Termination (A2C00060059)}	G
49	[Engine] [Module, Engine Control] [pressure temp sensor TMAP C56] [CAP,100nf,50V,+/-10%,X7R,0805] {Ag/PbO Termination (A2C00060059)}	G
50	[Engine] [Plumbing, Injector] [Common Rail / Verteilerrohr] [HIGH PRESSURE SENSOR / HOCHDRUCKSENSOR 5PP5-8] {MECHANICAL PARTS / MECHANISCHE BAUTEILE (FOORL01029)}	G

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ID	Path to Sub-Parts Containing Substances	Substance ID
51	[Engine] [Turbocharger] [Turbocharger] [Turbocharger] [Speed Sensor] [VR sensor system] [cable harness] {end sleeve (304K-64686)}	H
52	[Engine] [Turbocharger] [Turbocharger] [Turbocharger] [Speed Sensor] [cable harness] {end sleeve (304K-64686)}	H
53	[Engine] [Plumbing, Injector] {M8 x 1.25 6g x 45mm HEX FLANGE HEAD SCREW (5303611)}	J
54	[Engine] [Harness 638000902] [JEF-708SL-#12GXL-C194-80W(O183.8) MINI IN-LINE] {Holder (251-80W-232)}	K
55	[Engine] [TUBE FUEL SUPPLY] [16x12x9mm TUBE] {16x12x9mm Fuel tube (NT050)}	K
56	[Engine] [TUBE FUEL DRAIN] [12x8x6mm TUBE] {12X8X6 FUEL TUB (NT106)}	K
57	[Engine] [Water Pump Assembly, ISL] [Water Pump Bearing] [Grease L198] {Petamo GHY 133 N (013189255-0000)}	L
58	[Engine] [Water Pump] [BEARING R177.2G] [LUBRICATION R177.2G] {Lubricant_Grease (Petamo GHY 133 N Kinex)}	L
59	[Engine] [PUMP, WATER] [Water Pump Bearing] [Grease] {Grease L258 (301388113-0000)}	M
60	[Engine] [38MT 12V Motor] [Drive & Shaft Asm] [Gear Support Asm] [BEARING] [Grease] [L162] {Grease (001-948-067)}	M

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