

Classification of Cobalt substances under EU CLP (EU Regulation No. 1272/2008)

Please find the classification of cobalt and its substances under EU CLP in the table below. Please note that the information in the table only applies to pure substances and targets EU CLP requirements. Therefore, it only applies to the European Union territory.

In case of questions, please contact Cobalt Institute at REACHinfo@cobaltinstitute.org.

Substance name	EC number	CAS number	EU CLP harmonised classification	EU CLP self-classification
Cobalt massive (>99% over 1mm)	231-158-0	7440-48-4	Carc. 1B; H350 Muta. 2; H341 Repr. 1B; H360F Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Chronic 4; H413	Carc. 1B; H350 Muta. 2; H341 Repr. 1B; H360Fd Acute Tox 4; H302 Resp. Sens. 1B; H334 Skin Sens. 1; H317 Aquatic Chronic 3; H412
Cobalt powder (non-respirable)			Carc. 1B; H350 Muta. 2; H341 Repr. 1B; H360F Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Chronic 4; H413	Carc. 1B; H350 Muta. 2; H341 Repr. 1B; H360Fd Acute Tox 4; H302 Eye Irrit. 2; H319 Resp. Sens. 1B; H334 Skin Sens. 1; H317 Aquatic Acute 1; H400 (M = 10) Aquatic Chronic 1; H410 (M = 1)
Cobalt powder (respirable) ¹			Carc. 1B; H350 Muta. 2; H341 Repr. 1B; H360F Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Chronic 4; H413	Carc. 1B; H350 Muta. 2; H341 Repr. 1B; H360Fd Acute Tox 1; H330 Acute Tox 4; H302 Eye Irrit. 2; H319 Resp. Sens. 1B; H334 Skin Sens. 1; H317 Aquatic Acute 1; H400 (M = 10) Aquatic Chronic 1; H410 (M = 1)
Cobalt sulphate	233-334-2	10124-43-3	Carc. 1B; H350i (SCL ≥ 0.01 %) Muta. 2; H341 Repr. 1B; H360F *** Acute Tox. 4 *; H302 Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M = 10	Carc. 1B; H350i Muta. 2; H341 Repr. 1B; H360Fd Acute Tox. 4; H302 Eye Irrit. 2; H319 Resp. Sens. 1B; H334 Skin Sens. 1A; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 2; H411
Cobalt dichloride	231-589-4	7646-79-9	Carc. 1B; H350i (SCL ≥ 0.01 %) Muta. 2; H341 Repr. 1B; H360F *** Acute Tox. 4 *; H302 Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M = 10	Carc. 1B; H350i Muta. 2; H341 Repr. 1B; H360Fd Acute Tox. 4; H302 Eye Dam. 1; H318 Resp. Sens. 1B; H334 Skin Sens. 1A; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 2; H411

Substance name	EC number	CAS number	EU CLP harmonised classification	EU CLP self-classification
Cobalt dinitrate	233-402-1	10141-05-6	Carc. 1B; H350i (SCL ≥ 0.01 %) Muta. 2; H341 Repr. 1B; H360F *** Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M = 10	Ox. Sol. 2; H272 Carc. 1B; H350i Muta. 2; H341 Repr. 1B; H360Fd Acute Tox. 4; H302 Eye Dam. 1; H318 Resp. Sens. 1B; H334 Skin Sens. 1A; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 2; H411
Cobalt carbonate	208-169-4	513-79-1	Carc. 1B; H350i (SCL ≥ 0.01 %) Muta. 2; H341 Repr. 1B; H360F *** Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M = 10	Carc. 1B; H350i Muta. 2; H341 Repr. 1B; H360Fd Acute Tox. 4; H302 Resp. Sens. 1B; H334 Skin Sens. 1; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 2; H411
Cobalt oxide	215-154-6	1307-96-6	Acute Tox. 4 *; H302 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M = 10	Carc. 1B; H350i Repr. 1B; H360Fd Acute Tox 2; H330 Acute Tox. 3; H301 Resp. Sens. 1B; H334 Skin Sens. 1B; H317 Aquatic Acute 1; H400 (M = 10) Aquatic Chronic 1; H410 (M = 1)
Cobalt dihydroxide	244-166-4	21041-93-0		Carc. 1B; H350i Repr. 1B; H360Fd Acute Tox. 4; H302 Acute Tox. 1; H330 Eye Irrit. 2; H319 Resp. Sens. 1B; H334 Skin Sens. 1; H317 Aquatic Acute 1; H400 (M = 10) Aquatic Chronic 2; H411
Cobalt lithium dioxide	235-362-0	12190-79-3		Repr. 1B; H360Fd
Tricobalt tetraoxide	215-157-2	1308-06-1		Resp. Sens. 1B; H334 Aquatic Chronic 3; H412
Cobalt hydroxide oxide	234-614-7	12016-80-7		Resp. Sens. 1B; H334 Aquatic Chronic 3; H412
Cobalt sulphide	215-273-3	1317-42-6	Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M = 10	Resp. Sens. 1B; H334 Skin Sens. 1A; H317 Aquatic Acute 1; H400 (M = 10) Aquatic Chronic 2; H411
Cobalt(II) 4-oxopent-2-en-2-olate	237-855-6	14024-48-7		Repr. 1B; H360Fd Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 2; H411

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Cobalt oxalate	212-409-3	814-89-1		Repr. 1B; H360Fd Skin Sens. 1B; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 2; H411
Cobalt di(acetate)	200-755-8	71-48-7	Carc. 1B; H350i (SCL ≥ 0.01 %) Muta. 2; H341 Repr. 1B; H360F *** Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M = 10	Carc. 1B; H350i Muta. 2; H341 Repr. 1B; H360Fd Acute Tox. 4; H302 Eye Irrit. 2; H319 Resp. Sens. 1B; H334 Skin Sens. 1A; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 2; H411
Cobalt(2+) propionate	216-333-1	1560-69-6		Repr. 1B; H360Fd Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Irrit. 2; H319 Skin Sens. 1A; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 2; H411
Cobalt, borate propionate complexes	295-033-2	91782-61-5		Repr. 1B; H360FD Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 2; H411
Cobalt bis(2-ethylhexanoate)	205-250-6	136-52-7	Repr. 1B; H360D	Repr. 1B; H360FD Eye Irrit. 2; H319 Skin Sens. 1A; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 3; H412
Cobalt, borate 2-ethylhexanoate complexes	295-032-7	91782-60-4	Repr. 1B; H360D	Repr. 1B; H360FD Eye Irrit. 2; H319 Skin Sens. 1A; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 2; H411
Neodecanoic acid, cobalt salt	248-373-0	27253-31-2		STOT RE 1; H372 Acute Tox. 4; H302 Skin Sens. 1; H317 Aquatic Chronic 3; H412
Cobalt, borate neodecanoate complexes	270-601-2	68457-13-6		STOT RE 1; H372 Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400 (M = 1) Aquatic Chronic 2; H411
Stearic acid, cobalt salt	237-016-4	13586-84-0		STOT RE 1; H372 Skin Sens. 1; H317 Aquatic Chronic 3; H412

Substance name	EC number	CAS number	EU CLP harmonised classification	EU CLP self-classification
Resin acids and Rosin acids, cobalt salts	273-321-9	68956-82-1		Self Heat. 2; H252 STOT RE 1; H372 Resp. Sens. 1B; H334 Skin Sens. 1A; H317 Aquatic Chronic 3; H412

Notes

1: Containing >0.01% respirable particles, as determined by SWeRF model