

Bourns REACH Efforts

January 22, 2025

As of June 2007, the European Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) entered into force. As a downstream user of chemical substances, Bourns is fully aware of the requirements of REACH. It is our objective to fully comply with REACH securing the dependable supply of our products to our customers.

The Candidate List of Substances of Very High Concern (SVHC) Annex XIV was published on the website of the European Chemicals Agency (ECHA) in October 2008 with additions to the Candidate List in January 2010, March 2010, June 2010, August 2010, December 2010, June 2011, August 2011, December 2011, June 2012, December 2012, June 2013, December 2013, June 2014, December 2014, June 2015, December 2015, June 2016, January 2017, July 2017, January 2018, June 2018, January 2019, July 16, 2019, January 16, 2020, June 25, 2020, January 19, 2021, July 8, 2021, August 19, 2021, January 17, 2022, June 10, 2022, January 17, 2023, June 14, 2023, January 23, 2024, June 27, 2024, November 7, 2024 and January 21, 2025. There are now 247 substances identified as SVHC. The REACH Authorization list (Annex XVII) was updated on August 1, 2024, and includes 78 entries. No dangerous substances as listed and described in the conditions of restriction in Annex XVII are present in Bourns articles. There is no intentional release of substances in the normal use of these articles. Bourns does not manufacture substances or preparations.

The following chart lists those Bourns' models that contain a SVHC. If a model is not listed on the chart, it is not known to contain a SVHC.

CADMIUM: This chart also identifies some legacy parts that contains cadmium.

LEAD: Several product lines include lead in high temperature solder and/or lead in alloys or lead oxide in some ceramics. Some **standard** (non-RoHS compliant) parts may use SnPb plating on pins or terminals. The following chart provides information on the products (articles) that are now subject to reporting the presence of lead >0.1% w/w.

The following chart provides information on the Bourns models (articles) that are subject to declaration due to the presence of specifically listed SVHCs >0.1% w/w.

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Bourns Models <u>Currently Containing</u> Substances of Very High Concern (SVHC) (If a model is not listed below, it does <u>not</u> contain a SVHC)

Models	SVHC	SVHC CAS	Material in article	Comments
	reported		>0.1%	
AC Transient Protector Model: ACTP250J1BJR-S, ACTP250J1BJ	Lead	7439-92-1	High temperature solder	
Chip Inductors - Wirewound	Lead	7439-92-1	High temperature solder	
BBT Accessories: 4-Type Sneak Current Part numbers: A0341959; A0341960; A0341960-FR; A0342432; A0353716; A0353717; A0361534; A0365896	Lead	7439-92-1	Copper alloy with SnPb plating	Not RoHS compliant
C-303 5-Pin Solid State Protection Modules Part numbers: 303M-11Axxx, 303M-11Fxxx, 303M-12Axxx, 303M-12Fxxx (black, red, blue)	Lead	7439-92-1	Copper alloy with SnPb plating	Not RoHS compliant
C-303 Accessories: Voltage Protection, Sneak Current Protection and Heat Coils Part numbers: A0358105-ATT; A0358113; A0358116; A0358313; A0361531; A0361534; A0361540; A0366047; A0396098	Lead	7439-92-1	Copper alloy with SnPb plating	Not RoHS compliant
303M accessories: grounding modules, test cords Part numbers: A0294497; A0294510; A0334926/ATT; A0337864/ATT; A0350300	Lead	7439-92-1	SnPb solder	Not RoHS compliant

Central Office Protector;	Lead	7439-92-1	Copper alloy with	Not RoHS compliant
Protector Modules sealed with and without test points; 5 Pin Protector Modules	Lead	7433 32 1	SnPb plating	Not North compliant
Part numbers 2410 series: 2410-310-G-xxxx, 2410-31-G-xxxx, 2410-33-G-xxxx, 2410-36-G-xxxx, 2410-37-G-xxxx, 2410-39-G-xxxx, 2410-41-G-xxxx, 2410-46-G-xxxx, 2410-71-G-xxxx, 2410-76-G-xxxx.				
Ceramic Fuel card (Automotive) Part number: 3714X-CHD-000	Lead	7439-92-1	Lead solder	Note: most fuel cards contain a lead-containing glass in the inks (not SVHC) and no other SVHC.
Ceramic Multifuse CMF-SDPxxx	Lead	7439-92-1	High temp solder	
Models	SVHC reported	SVHC CAS	Material in article >0.1%	Comments
Chip Diodes — Models: 1.5SMBJ, 1.5SMB; 1.5SMC, 15KPA-SD-Q, 5.0SMDJ, CD0380xR, CD1206, CD123D, CD1408, CD1607, CD2010, CD214A-B, CD214B-B, CD214C- B320-360, CD214C-s3x, CD214X-F, CD214x-FSxx, CD214x-R, CD214x-T, CD216A, CD2320, CD-DFxxS, CD-DFxxSL where x is selected voltage.	Lead	7439-92-1	High temp solder	
Chip Diodes — Models: CD-HD, CDKBP, CD-MBLxxS, CD-MBLxxSL, CD-MMBL110S, CDNBS04, CDTO269-BR, CDWBS16, P4SMA, P6SMB, R3803; SM8S, SMA6J, SMA6J-Q, SMF4L, SMAJ, SMAJ-Q, SMBJ, SMBJ-Q, SMCJ, SMCJ-Q, SMLJ, SMLJ-Q, where x is selected voltage.	Lead	7439-92-1	High temp solder	
DSL POTS Splitters (standard - Not RoHS compliant)	Lead	7439-92-1	Copper alloy with SnPb plating	
Models: 3610, 3611, 3610A2 VSDL2; 3611A2 VSDL2; 3610V3				
300V SSOVP C/O Protection Unit Part number: CLS50300	Lead	7439-92-1	Copper alloy with SnPb plating	Not RoHS compliant
Encoders Models: EM14, EMS22A, EMS22D, EMS22P, EMS22Q, EN, ES14, PEC11D, PEC11H,	Lead	7439-92-1	Lead in copper alloy	

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PES11R				
Encoders (Standard, Not	Lead	7439-92-1	SnPb coating on	For standard , non-compliant version
RoHS compliant)	Lead	7 133 32 1	pins/terminals	Tor standard, non compliant version
Models: EPS, ES (no L suffix)				
Wodels. Li O, LO (110 L Sullix)				
Gas Discharge Tube	Lead	7439-92-1	Sn90Pb10 plating	For standard , non-compliant version
(Standard model - Not				(no LF suffix in part number)
RoHS compliant - Non- LF)				
Li)				
Models: 2020-xxT-XX, 2026-xx- XX, 2026-xx-CxxM1xx/MSP,				
2027-xx-SM, 2027-xx-XX, 2030-				
xxT-SM, 2031-xxT-SM, 2035-xx- SM, 3025-xx-XX, 2036-xxSM,				
2036-xx-XX, 2037-xx-XX, 2038-xx-				
SM, 2038-xx-XX, 2039-xx-SM, 2047-xx-A (no LF suffix)				
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Models	SVHC	SVHC CAS	Material in article	Comments
	reported		>0.1%	
Hybrid Position Sensor	Lead	7439-92-1	Lead in copper	
			alloys and lead in	
HES38U-RS485			high temp solder	
LED Shunt Protector	Lead	7439-92-1	High temp solder	
	Lead	7433 32 1	Thigh temp solder	
Part numbers: LSPxxxxAJR; LSPxxxxBJR where xxxx is the				
selected off-state voltage				
Military trimmers:				
Cermet Wirewound				
RJ12 RT12	Lead	7439-92-1	Cermet models	Alternative commercial parts are
RJ22 RT22			use Sn90Pb10	available without lead plating/solder.
RJ24 RT24			coating on pins;	
RJR24 RTR22 RJ26 RTR24			Wire wounds are	
RJR26 RT26			60/40 hot dipped	
RJ50				
RJR50				
Panel Controls (Cermet)	Lead	7439-92-1	Lead in alloys	
Models: 51, 53, 81, 82, 85, 86, 91,				
92, 93, 94, 95, 96, 97, 99, 3310,				
3852, 3856, 3862 (Cermet option)				
Panel Controls (Conductive Plastic)	Lead	7439-92-1	Lead in alloys,	
,			copper and	
Models: 39, 3900, 51, 53, 54, 56, 81, 82, 85, 86, 91, 92, 93, 94, 95,			aluminum	
96, 97, 99, 3315, 3851 (CP option)				
Panal Cantrala	1	7420 02 1	Landin	
Panel Controls	Lead	7439-92-1	Lead in copper	
PDB183, PDB241-GTR, PCB241-			alloy	
SOTL, PSM, PSP, PTH, PTJ				

Panel Controls	Lead	7439-92-1	Lead in alloys,	
(Wirewound)	Lead	7433 32 1	copper and	
Models: 83			aluminum	
Panel Controls	Lead	7439-92-1	'''	
(Wirewound)			alloy	
Models: 84				
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2470 series 5-Pin -TBU	Lead	7439-92-1	Copper alloy with	Not RoHS compliant
Yellow, Black, Blue, Violet			SnPb plating	
or Orange; includes plated, sealed and/or test points				
sealed and/or test points				
Part numbers: 2470 series: 2470-46-G0-410-G-xxxx. 2470-41-G-				
xxxx, 2470-43-G-xxxx, 2470-46-G-				
xxxx, 2470-47-G-xxxx, 2470-49-G-xxxx. Includes parts plated,				
sealed and/or with test points.				
Models	SVHC	SVHC CAS	Material in article	Comments
	reported		>0.1%	
5 Pin PTC 2440 and 2442	Lead	7439-92-1	Copper alloy with	Not RoHS compliant
series			SnPb plating	·
D. 1				
Part numbers: 2440 series: 2440- 41-G-xxxx; 2440-43-G-xxxx; 2440-				
49-G-xxxx. 2442 series: 2442-41-G-xxxx.				
G-XXX.				
5 Pin PTC 2430 series	Lead	7439-92-1	Copper alloy with	Not RoHS compliant
Part numbers: 2430 series:			SnPb plating	
2430-41-G-xxxx; 2430-43-G-xxxx				
5 Pin PTC 2440 and 2442	Lead	7439-92-1	Copper alloy with	Not RoHS compliant
series			SnPb plating	
Part numbers: 2440 series: 2440-				
41-G-xxxx; 2440-43-G-xxxx; 2440- 49-G-xxxx. 2442 series: 2442-41-				
G-xxxx.				
Precision Potentiometers	Lood	7420 02 1	Load in allows	
(Wirewound):	Lead	7439-92-1	Lead in alloys	
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Models: 3500S, 3501H, 3547S, 3548H, 3548S, 3549H, 3549S,				
3590P, 3590S, 3700S, 3701H, 3750S				
0.000				
Precision Potentiometers	Lead	7439-92-1	Lead in alloys	
(Conductive Plastic)			,	
Models: 3751H, 6537S, 6538S,				
6539S, 6574S, 6630S, 6637S, 6638S, 6639S, 6657S				
00000, 00090, 00070				
Precision Potentiometers	Lead	7439-92-1	Lead in alloys	
(Wirewound)				

(Wirewound)

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Models: 3540S, 3541H, 3543S, 3545S				
Protector Modules sealed with and without test points; 5 Pin Protector Modules Part numbers 2420 series: 2420-310-G-xxxx, 2420-31-G-xxxx, 2420-36-G-xxxx, 2420-37-G-xxxx, 2420-39G-xxxx	Lead	7439-92-1	Copper alloy with SnPb plating	
Power TVS Products Models: PTVS1-xxxx-xx; PTVS2- xxxx-xx; PTVS3-xxxx-xx; PTVS6- xxxx-xx; PTVS10-xxxx-xx; PTVS15-xxxx-xx; PTVS20-xxxx-xx	Lead	7439-92-1	High temp solder	
Models	SVHC reported	SVHC CAS	Material in article >0.1%	Comments
QMP - 4-Pin Protector modules - Solid State or Gas Tube options: Part numbers: A0294497; A0294510; A0334926/ATT; A0337864/ATT; A0350300	Lead	7439-92-1	Copper alloy with SnPb plating	
Resistor Networks: 41xxR, 43xxH/M/R, 44xxP, 48xxP with LF suffix	Lead	7439-92-1	High temp solder	LF versions
Resistor Networks – Standard: 41xxR, 43xxH/M/R, 48xxP No LF suffix	Lead	7439-92-1	Sn60Pb40 plating on pins and Pb solder	For standard , non-compliant versions
Resistor Networks: 41xxT, 43xxT, 43xxS, 43xxK, 44xxT, 48xxT with LF suffix	Lead	7439-92-1	High temp solder	LF versions
Resistor Networks – Standard: 41xxT, 43xxT, 43xxS, 43xxK, 48xxT	Lead	7439-92-1	Sn60Pb40 plating on pins	For standard , non-compliant versions
Non-Contacting Analog Rotary Position Sensors and Non-Contacting Multiturn Magnetic Sensors AMS22B; AMM20B; 4-DMS22B	Lead	7439-92-1	Lead in alloys	

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SEMS - Integrated Circuit MM Hybrid (Not RoHS Compliant)	Lead	7439-92-1	Pb solder 62Sn36Pb2Ag	Non-compliant version
140023				
Sensors & Controls: 3610S series – 10-Turn Precision Knobpot	Cadmium	7440-43-9	Alloy used for tab contains 18% Cd. w/w >0.1%	Part is not RoHS compliant. No material change planned.
SinglFuse SMD Fuse Model series: SF-2410F-T; SF-2410FR-T; SF-2410HI-T; SF-3812F-T; SF-3812FG-T; SF-3812SP-T; SF-3812TM-T	Lead	7440-43-9	Lead in high temp solder	
Models	SVHC reported	SVHC CAS	Material in article >0.1%	Comments
Solenoid TMA70295CF, TMA70266CF	Lead	7439-92-1	Lead in steel alloy, High temp solder	
Solenoid plunger TMA70295 12L14	Lead	7439-92-1	Lead in steel alloy	
SPD Test Kits: 4030-01; 4030-02; 4040-01; 4040-01-W-C1	Lead	7439-92-1	SnPb plating on copper wire	
Thyristor Surge Protectors: SMA, SMB series Models: TISP4xxxHxBJR-S, TISP4CxxxH3BJR-S, TISP4xxxM3BJR-S, TISP4xxxM3AJR-S, TISP4xxxLxBJR-S, TISP4xxxLxBJR-S, TISP4xxxT3BJR-S, TISP4xxxT3BJR-S, TISP4xxxT3BJR-S, TISP4xxxT3BJR-S, TISP4xxxT3BJR-S, TISP4xxxxT3BJR-S, TISP4xxxxT3BJR-S, TISP4xxxxT3BJR-S, TISP4xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	Lead	7439-92-1	High temp solder	
Trimming Potentiometer (Trimpot Wirewounds) Standard - not RoHS Compliant	Lead	7439-92-1	Lead in copper alloy; Copper alloy with SnPb plating	Not RoHS compliant
Trimming Potentiometer (Trimpot Cermet) RoHS compliant	Lead	7439-92-1	Lead in copper alloy	
Models with LF suffix : 3006, 3009,3059, 3082, 3252, 3262, 3266, 3269, 3292, 3296, 3299				

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Models without LF suffix: 3214, 3223, 3224, PV36, PV37, PVG5				
Trimming Potentiometer (Trimpot Wirewounds) RoHS compliant	Lead	7439-92-1	Lead in copper alloy	
Model series: 3057, 3057L, 3250, 3260, 3290				
Trimming Potentiometer	Lead	7439-92-1	Lead in copper	Cadmium exemption (8b) is dependent
(Trimpot Wirewounds)	Cadmium	7440-43-9	alloy; Cadmium in	on the user's RoHS category – valid for
RoHS compliant		7 1 10 10 5	electrical contact.	Categories 8, 9 and 11.
Model series 3005			ciccirical contact.	categories o, 5 una 11.
Trimpot Potentiometers Cermet (Standard - not RoHS compliant)	Lead	7439-92-1	Lead in copper alloy; Copper alloy with SnPb plating	For standard , non-compliant versions.
Models: 3006, 3009, 3059, 3082, 3252, 3262, 3266, 3269, 3292, 3296, 3299, 3329, 3339, 3352, 3361, 3362, 3386				
Models	SVHC	SVHC CAS	Material in article	Comments
	reported		>0.1%	
Varistors High Energy:	Lead	7439-92-1	High temp solder	
ZOV150K40D3MEOBO				
ZOV150K40MEOBOV20				
ZOV275K25MPPEV10				
ZOV275K40D2MEOBO				
ZOV275K40MEOBOV20				
ZOV275K40MEX1LEF				
ZOV320K40MEOBOV20				
ZOV320K80MEOBOV25				
ZOV385K40MEOBOV20				
ZOV385K80MEOBOV25				
ZOV440K40MEOBOV20				
ZOV75K40MEOBOV20				
ZOVA275K40D2MEOBO				
Fixed Resistors -Riedon: RSA; RSB; RSC; RSH; RSI; RSJ; RSN; RSW;	Lead	7439-92-1	Lead in copper alloy	
Fixed Resistors -Riedon: SSD	Lead	7439-92-1	High temp solder	