



Bourns REACH Efforts

June 14, 2023

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 and June 14, 2023. There are now 235 substances identified as SVHC. The REACH Authorization list (Annex XVII) was updated on December 15, 2021 and includes 71 substances. 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 **Currently Containing** Substances of Very High Concern (SVHC)
 (If a model is not listed below, it does **not** contain a SVHC)

Models	SVHC reported	SVHC CAS	Material in article >0.1%	Comments
AC Transient Protector Model: ACTP250J1BJR-S, ACTP250J1BJ	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; Protector Modules sealed with and without test points; 5 Pin Protector Modules 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.	Lead	7439-92-1	Copper alloy with SnPb plating	Not RoHS compliant
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	Lead	7439-92-1	High temp solder	

CMF-SDPxxx				
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, CD003B0xR, 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, CDT0269-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) Models: 3610, 3611, 3610A2 VSDL2; 3611A2 VSDL2; 3610V3	Lead	7439-92-1	Copper alloy with SnPb plating	
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, PES11R	Lead	7439-92-1	Lead in copper alloy	
Encoders (Standard, Not RoHS compliant) Models: EPS, ES (no L suffix)	Lead	7439-92-1	SnPb coating on pins/terminals	For standard , non-compliant version

Gas Discharge Tube (Standard model - Not RoHS compliant - Non-LF) 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)	Lead	7439-92-1	Sn90Pb10 plating	For standard , non-compliant version (no LF suffix in part number)
Models	SVHC reported	SVHC CAS	Material in article >0.1%	Comments
Hybrid Position Sensor HES38U-RS485	Lead	7439-92-1	Lead in copper alloys and lead in high temp solder	
LED Shunt Protector Part numbers: LSPxxxxAJR; LSPxxxxBJR where xxxx is the selected off-state voltage	Lead	7439-92-1	High temp solder	
Military trimmers: Cermet Wirewound RJ12 RT12 RJ22 RT22 RJ24 RT24 RJR24 RTR22 RJ26 RTR24 RJR26 RT26 RJ50 RJR50	Lead	7439-92-1	Cermet models use Sn90Pb10 coating on pins; Wire wounds are 60/40 hot dipped .	Alternative commercial parts are available without lead plating/solder.
Panel Controls (Cermet) Models: 51, 53, 81, 82, 85, 86, 91, 92, 93, 94, 95, 97, 99, 3852, 3856, 3862 (Cermet option)	Lead	7439-92-1	Lead in alloys	
Panel Controls (Conductive Plastic) Models: 39, 3900, 51, 53, 56, 81, 82, 85, 86, 91, 92, 93, 94, 95, 97, 99, 3851 (CP option)	Lead	7439-92-1	Lead in alloys, copper and aluminum	
Panel Controls PDB183, PDB241-GTR, PCB241-SOTL, PSM, PSP, PTH, PTJ	Lead	7439-92-1	Lead in copper alloy	
Panel Controls (Wirewound) Models: 83	Lead	7439-92-1	Lead in alloys, copper and aluminum	

Panel Controls (Wirewound) Models: 84	Lead	7439-92-1	Lead in copper alloy	
2470 series 5-Pin -TBU Yellow, Black, Blue, Violet or Orange; includes plated, 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.	Lead	7439-92-1	Copper alloy with SnPb plating	Not RoHS compliant
Models	SVHC reported	SVHC CAS	Material in article >0.1%	Comments
5 Pin PTC 2440 and 2442 series Part numbers: 2440 series: 2440-41-G-xxxx; 2440-43-G-xxxx; 2440-49-G-xxxx. 2442 series: 2442-41-G-xxxx.	Lead	7439-92-1	Copper alloy with SnPb plating	Not RoHS compliant
5 Pin PTC 2430 series Part numbers: 2430 series: 2430-41-G-xxxx; 2430-43-G-xxxx	Lead	7439-92-1	Copper alloy with SnPb plating	Not RoHS compliant
5 Pin PTC 2440 and 2442 series Part numbers: 2440 series: 2440-41-G-xxxx; 2440-43-G-xxxx; 2440-49-G-xxxx. 2442 series: 2442-41-G-xxxx.	Lead	7439-92-1	Copper alloy with SnPb plating	Not RoHS compliant
Precision Potentiometers (Wirewound): Models: 3500S, 3501H, 3547S, 3548H, 3548S, 3549H, 3549S, 3590P, 3590S, 3700S, 3701H, 3750S	Lead	7439-92-1	Lead in alloys	
Precision Potentiometers (Conductive Plastic) Models: 3751H, 6537S, 6538S, 6539S, 6574S, 6630S, 6637S, 6638S, 6639S, 6657S	Lead	7439-92-1	Lead in alloys	
Precision Potentiometers (Wirewound) Models: 3540S, 3541H, 3543S, 3545S	Lead	7439-92-1	Lead in alloys	

Protector Modules sealed with and without test points; 5 Pin Protector Modules Part numbers 2420 series: 2420-310-G-xxxx, 2420-31-G-xxxx, 2420-33-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	
SEMS - Integrated Circuit MM Hybrid (Not RoHS Compliant)	Lead	7439-92-1	Pb solder 62Sn36Pb2Ag	Non-compliant version

N6623				
Sensors & Controls: 3610S series – 10-Turn Precision Knoppot	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, TISP4xxxLxAJR-S, TISP4xxxH3BJR-S, TISP4xxxT3BJR-S, TISP4xxxJxBJR-S, TISPxxxH3BJR-S where xxxx represents available voltage options	Lead	7439-92-1	High temp solder	
Trimming Potentiometer (Trimpot Wirewounds) Standard - not RoHS Compliant Model: 3360	Lead	7439-92-1	Lead in copper alloy; Copper alloy with SnPb plating	Not RoHS compliant
Trimming Potentiometer (Trimpot Cermet) RoHS compliant Models with LF suffix: 3006, 3009, 3059, 3082, 3252, 3262, 3266, 3269, 3292, 3296, 3299 Models without LF suffix: 3214, 3223, 3224, PV36, PV37, PVG5	Lead	7439-92-1	Lead in copper alloy	

Trimming Potentiometer (Trimpot Wirewounds) RoHS compliant Model series: 3057, 3057L, 3250, 3260, 3290	Lead	7439-92-1	Lead in copper alloy	
Trimming Potentiometer (Trimpot Wirewounds) RoHS compliant Model series 3005	Lead Cadmium	7439-92-1 7440-43-9	Lead in copper alloy; Cadmium in electrical contact.	Cadmium exemption (8b) is dependent on the user's RoHS category – valid for Categories 8, 9 and 11.
Trimpot Potentiometers Cermet (Standard - not RoHS compliant) Models: 3006, 3009, 3059, 3082, 3252, 3262, 3266, 3269, 3292, 3296, 3299, 3329, 3339, 3352, 3361, 3362, 3386	Lead	7439-92-1	Lead in copper alloy; Copper alloy with SnPb plating	For standard , non-compliant versions.
Models	SVHC reported	SVHC CAS	Material in article >0.1%	Comments
Varistors High Energy: ZOV150K40D3MEOBO ZOV150K40MEOBOV20 ZOV275K25MPPEV10 ZOV275K40D2MEOBO ZOV275K40MEOBOV20 ZOV275K40MEX1LEF ZOV320K40MEOBOV20 ZOV320K80MEOBOV25 ZOV385K40MEOBOV20 ZOV385K80MEOBOV25 ZOV440K40MEOBOV20 ZOV75K40MEOBOV20 ZOVA275K40D2MEOBO	Lead	7439-92-1	High temp solder	