

Dated: September 04, 2025

REACH Compliance Statement

Knowles Precision Devices is a leading supplier of electronic components, supporting the European REACH Directive and customer requirements of our industry.

REACH directive

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), which established a European Chemicals Agency and amended Directive 1999/45/EC, including legal text published in the Official Journal of the European Union.

REACH restricted substances

All product lines listed in Tables A to E comply with the restrictions on substances, mixtures and/or articles are set out in Annex XVII of REACH, which includes all entries for Lead (Pb) and its compounds.

REACH declarable substances

In compliance and fulfilling the communication requirements of Article 33 of the REACH directive and Article 9 (1)(i) of the SCIP Directive (EU) 2018/851. Knowles declares the parts listed in Tables A to E below contain the following REACH Candidate list Substance of Very High Concern (SVHC) in concentrations above the threshold limit of 0.1%w/w.:

- **Lead (Pb) CAS number 7439-92-1**
- **Lead Titanium Oxide (PbTiO₃) CAS number 12060-00-3**

List of Statements

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Microwave Products, Single Layer Capacitors, JR & JZ trimmers, Non-Magnetic Hardware, & Resonators

Table A: Knowles Cazenovia (Cazenovia)

Product line	Description	TARIC	SVHC
(Knowles DLI & Compex Brand) Single-Layer Capacitors	Devices with Leads	8532230000	Lead (Pb) 64 to 73% w/w.(i)
	Devices without Leads		REACH 250 compliant (25-06-2025)
(Knowles DLI Brand) Thin Film Devices	Devices with Metal Covers	8534001900	Lead (Pb) 0.1 to 6.0% w/w.(i)
	Devices without Covers		REACH 250 compliant (25-06-2025)
(Knowles Horizon Line) Thin Film Devices BTP	Devices without covers		REACH 250 compliant (25-06-2025)
(Knowles Voltronics Brand) JR(L)/JZ(L) Trimmer capacitors	All		REACH 250 compliant (25-06-2025)
(Knowles Voltronics Brand) Non-Magnetic Hardware	All	7415330000	Lead (Pb) 2.5 to 3.5 % w/w.(ii)

- (i) Exposed Lead (Pb) Solder in the lead/cover attachment and could represent a risk of exposure through touch
- (ii) Consisting entirely of the Non-Magnetic alloy Brass the atomically substitutional Lead Element is contained within the same crystal structure and presents no hazard to humans or the environment under normal handling and use.

Patrick Cole

Patrick Cole

Quality Manager

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Table B: Knowles Cazenovia (San Diego)

Product line	Description	TARIC	SVHC
(Knowles IMC Brand) Filters*	PCB or chemical etched housing, surface mount	8517700000	Lead (Pb) 0.1 to 10% w/w. RF In/Out and ground surface finish and solder joints (i)
	Machined housing, surface mount and connectorized	8517700000	Lead (Pb) 0.1 to 6% w/w. Solder joints (i)
	RF Filters for radiobroadcasting (STL)	8529906590	Lead (Pb) 0.1 to 2% w/w. Solder joints (i)
(Knowles IMC Brand) Resonators	All		REACH 250 compliant (25-06-2025)

(*) Reach compliant filters available upon customer request

- (i) Exposed Lead (Pb) in, Solder joints, the RF In/Out, and ground surface finish which could represent a risk of exposure through touch.



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Multilayer Capacitors, Radial Leaded, Ribbon Leaded, EMI filters, Trimmers, Tuning tools, & Variable Inductors

Table C: Knowles Novacap (Valencia)

Product line	Description	TARIC	SVHC
(Knowles Novacap Brand) Multilayer Capacitors	Dielectric codes B, C, D, E, F, G, J, K, L, N, S, T, U, V, or with termination codes D, E, Y, or leaded parts with Lead (Pb) bearing solder.	8532240000	<u>Dielectric</u> Lead Titanium Oxide (PbTiO ₃) 1 to 8% w/w.(i) <u>Termination</u> Lead (Pb) 0.1 to 1% w/w.(ii) <u>Lead solder</u> Lead (Pb) 0.1 to 6.0% w/w (iii)
	Dielectric codes AH, BB, BL, BN, W, BW, CF, M, NA, Q, RB, RC, RD, RE, RF, RG, RL, RN, RS, RT, RU, RV, UL and with termination codes B, C, FR, K, N, NG, PR, SR		REACH 250 compliant (Jun-25-2025)
(Knowles DLI Brand) Multilayer Capacitors	Termination codes U, Y, V or leaded parts with Lead (Pb) bearing solder	8532240000	<u>Termination</u> Lead (Pb) 0.1 to 1% w/w. (ii) <u>Lead solder</u> Lead (Pb) 0.1 to 6.0% w/w (iii)
	Dielectric codes AH, CF, BL, NA and with termination codes M, P, Q, S, W, Z.		REACH 250 compliant (Jun-25-2025)

Disclosure for Legacy Novacap Capacitors with dielectric codes P, Y, Z these components contain up to 70% by weight of Lead monoxide CAS # 1317-36-8. There are no substitute lead-free capacitors available for these dielectrics.

- (i) The Lead Titanium Oxide substance is chemically combined in a ceramic glass matrix and presents no hazard to humans or the environment under normal handling and use.
- (ii) The Lead substance could represent a risk of exposure through touch.
- (iii) The Lead Solder is not exposed and presents no hazard to humans or the environment under normal handling and use.

Claudia Sanchez

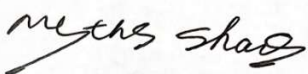
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Table D: Knowles Syfer (Suzhou)

Product line	Description	TARIC	SVHC
(Knowles Syfer Brand) Multilayer Capacitors	Dielectric codes B,R,N,T with termination codes F,J,Q,Y and Suffix code HPB	8532240000	<u>Dielectric</u> Lead Titanium Oxide (PbTiO ₃) 1 to 8% w/w.(i)

	Dielectric codes B,R,N,T with termination codes H,A,6,7 and Suffix code HPB	8532240000	<u>Dielectric</u> Lead Titanium Oxide (PbTiO ₃) 1 to 8% w/w.(i) <u>Termination</u> Lead (Pb) 0.1 to 1% w/w. (ii)
	Dielectric codes A,B,C,D,E,F,G,H,J,K,N,P,Q,R,S,T, U,V,X with termination codes F,G,J,Q,Y,2,3		REACH 250 compliant (Jun-25-2025)
	Dielectric codes A,B,C,D,E,F,G,H,J,K,N,P,Q,R,S,T, U,V,X with termination codes H,A,4,5,6,7	8532240000	<u>Termination</u> Lead (Pb) 0.1 to 1% w/w. (ii)
(Knowles Syfer Brand) Radial Leaded Capacitors	Termination codes C,X,B,R with Suffix code C42		REACH 250 compliant (Jun-25-2025)
	Termination codes C,X, with Suffix code A31,A97	8532240000	<u>Lead solder</u> Lead (Pb) 0.1 to 6.0% w/w (iii)
(Knowles Syfer Brand) Ribbon Leaded Capacitors	Dielectric codes Q with termination codes B,V	8532240000	<u>Lead solder</u> Lead (Pb) 0.1 to 6.0% w/w (iii)
(Knowles Syfer Brand) Surface mount EMI Filters	Filter series SB** with Dielectric codes C,X		REACH 250 compliant (Jun-25-2025)
	Filter series SB** with Dielectric codes C,X and Suffix code /0107	8532240000	<u>Termination</u> Lead (Pb) 0.1 to 1% w/w. (ii)
(Knowles Syfer Brand) Panel mount EMI Filters	Filter series SFS* with Dielectric codes C,X	8532240000	<u>Dielectric</u> Lead Titanium Oxide (PbTiO ₃) 1 to 8% w/w.(i)
(Knowles Syfer Brand) Bolt-in Panel mount EMI Filters	Filter series SF** with Dielectric codes C,X	8532240000	<u>Dielectric</u> Lead Titanium Oxide (PbTiO ₃) 1 to 8% w/w.(i)
	Filter series SF** with Dielectric codes C,X and Suffix Code /0100	8532240000	<u>Termination</u> Lead (Pb) 0.1 to 1% w/w. (ii)

- X8R (N & T) dielectric material was changed to lead free RoHS compliant from 1st February 2017. If suffix HPB is applied, then the 'old' lead containing dielectric is used.
- BX & RX (B & R) dielectric material was changed to lead free RoHS compliant from 1st February 2017
 - (i) The Lead Titanium Oxide substance is chemically combined in a ceramic glass matrix and presents no hazard to humans or the environment under normal handling and use.
 - (ii) The Lead substance could represent a risk of exposure through touch.
 - (iii) The Lead Solder is not exposed and presents no hazard to humans or the environment under normal



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Table E: Knowles Johanson & Voltronics (Dominican Republic)

	Product line	Description	TARIC	SVHC
(Knowles Johanson Brand)	Cera Trimmer Capacitors	Devices with ceramic dielectric structure & gold finish terminals	8532.30.0000	REACH 250 compliant (25-06-2025)
	Thin Trimmer Capacitors			
	Seal Trimmer Capacitors			
	Ceramic Trimmer Capacitors			
	Tuning Tools 41 and 21 Series	Devices with Delrin & Alumina		
	Tuning Tools 8766	Devices with Zytel and Steel		
	Tuning Tools (Molded) 8777	Devices with Polycarbonate & Spring Steel		
	Variable Inductor	Devices variable inductor core	8532.30.0000	<u>Copper Alloy</u> Lead (Pb) 0.1 to 4.0% w/w (ii)
	Giga Trimmer / Eco Trim	Devices with Copper Alloy		
	Tuning Element			
	Tunable Input Balun			
	Air Capacitor Trimmer	Devices with Copper Alloy & High Melting temperature type Solders	8532.30.0000	<u>Copper Alloy</u> Lead (Pb) 0.1 to 4.0% w/w (ii) <u>Lead solder</u> Lead (Pb) 0.1 to 20% w/w (i)
	Dyna Trimmer			
	Cera Trimmer Capacitors	Devices with Lead in ceramic dielectric structure & gold finish terminals	8532.30.0000	<u>Dielectric Ceramic</u> Lead (Pb) 0.1 to 4.0% w/w (ii)
	Thin Trimmer Capacitors			
	Seal Trimmer Capacitors			
	Cera Trimmer Capacitors	Devices with ceramic dielectric structure & solder finish terminals	8532.30.0000	REACH 250 compliant (25-06-2025)
	Thin Trimmer Capacitors			
	Seal Trimmer Capacitors			
	Product line	Description	TARIC	SVHC
(Knowles Voltronics Brand)	Voltronics NMNT-Line & NT-Line	Devices with Copper Alloy	8532.30.0000	<u>Copper Alloy</u> Lead (Pb) 0.1 to 4.0% w/w (ii)
	Voltronics NMT-Line, T-Line & S-Line	Devices with Glass dielectric structure	8532.30.0000	<u>Copper Alloy</u> Lead (Pb) 0.1 to 4.0% w/w (ii) <u>Glass dielectric</u> Lead (Pb) Oxide 0.1 to 1.0% w/w (ii)
	Voltronics Q-Line			
	Voltronics A-Line	Devices with Copper Alloy & High Melting temperature type Solders	8532.30.0000	<u>Copper Alloy</u> Lead (Pb) 0.1 to 4.0% w/w (ii) <u>Lead solder</u> Lead (Pb) 0.1 to 20% w/w (i)
	Voltronics A1-Line	Devices with Copper Alloy & High Melting temperature type Solders		
	Voltronics K-Line			
	Voltronics A4-Line			
	Tuning Tool TT-series	Tuning with spring steel	8532.30.0000	REACH 250 compliant (25-06-2025)

(i) The Lead substance could represent a risk of exposure through touch.

(ii) The Copper Alloy, Glass Dielectric & Ceramic Dielectric are not exposed and present no hazard to humans or the environment under normal handling and use.



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