

Subject: Swagelok Products in Compliance with the Material Restrictions of European Directive 2015/863/EU
Revision: AD (October 2020)

Table 1 on the following pages lists Swagelok® products by catalog that, with few exceptions, have been determined to be in compliance with the material restrictions of European Directive 2015/863/EU. On their own, most Swagelok components do not qualify as electrical or electronic equipment (EEE) requiring compliance under the RoHS Directive. However, OEMs that manufacture EEE might require RoHS certification for non-EEE Swagelok components to certify their equipment to RoHS.

This document addresses standard catalog items- it does not address products with suffix codes, boxcar numbers, etc. This is not an exhaustive list, and it should not be assumed that the information shown in the right-hand column of Table 1 represents a complete listing of non-compliant Swagelok products. Questions regarding products not shown in the table, and requests for certification of specific part numbers, should be directed to the Certification Department.

The RoHS status of the Swagelok products is based on information provided by our suppliers, our own detailed review, and in some instances 3rd party testing. A product is designated as in compliance with the material restrictions of the RoHS Directive by meeting one of the following criteria:

- The product does not contain any of the restricted substances referred to in Annex II of the RoHS Directive.
- The product contains restricted substances at levels below the allowable maximum concentration values.
- The product contains restricted substances at levels above the allowable maximum concentration values but falls under one of the exemptions as listed in the Annex III to the RoHS Directive.

For the above definition, the maximum concentration values of the restricted substances by weight in homogenous materials are as follows:

Lead	0.1%
Mercury	0.1%
Hexavalent Chromium	0.1%
Polybrominated Biphenyls (PBB)	0.1%
Polybrominated Diphenyl Ethers (PBDE)	0.1%
Cadmium	0.01%
Bis(2-ethylhexyl) phthalate (DEHP)	0.1%
Butyl benzyl phthalate (BBP)	0.1%
Dibutyl phthalate (DBP)	0.1%
Diisobutyl phthalate (DIBP)	0.1%

Regarding the products listed in the table as “non-compliant”, Swagelok is in the process of considering changes or alternative products that will provide RoHS compliant options. Accessory products such as gap gauges and hand tools are listed as “out of scope” since there is no chance of them being incorporated into electrical or electronic equipment.

The list of Swagelok products in compliance with the material restrictions of the RoHS Directive is based upon information obtained from sources which Swagelok believes are reliable, and the information provided in Table 1 is accurate to the best of our knowledge.

Please contact us for further assistance.

Sincerely,



Steven Volcansek
Product Compliance Manager

Table 1

All products in the listed catalogs are compliant with the material restrictions of the RoHS Directive (2015/863/EU) unless otherwise indicated in this table.		
Catalog Description	Catalog #	Products non-compliant or out of scope
PFA Tube Fittings	MS-01-05	None present
Industrial Excess Flow Valves, XS Series	MS-01-110	None present
Quick-Connects	MS-01-138	None present
Gaugeable Tube Fittings and Adapter Fittings	MS-01-140	NON-COMPLIANT: Hexavalent Chromium and Cadmium in aluminum components OUT OF SCOPE: Tools Note: Carbon Steel is to 6a exemption and Brass is to 6c exemption
Proportional Relief Valves, R Series	MS-01-141	NON-COMPLIANT: Products that contain components EP-9E-A3, SS-3AS-R4-BN, SS-3AS-R4-EP and SS-3AS-R4-NE (DEHP in bonded poppet) Lead in lock wire seal of Spring kits
Metering Valves, S, M, L, and 31 Series	MS-01-142	NON-COMPLIANT: Cadmium plating on steel fasteners
Ball Valves, General Purpose and Special Application, 60 Series	MS-01-146	NON-COMPLIANT: Cadmium plating on steel fasteners
Pipe Fittings	MS-01-147	None present
Weld Fittings, Ultrahigh-Purity and Industrial	MS-01-149	None present
Compact, High-Flow Gas Regulators, HF Series	MS-01-156	None present
Stainless Steel Titanium Alloyed Tubing (Metric)	MS-01-158-SCS	None present
Integral-Bonnet Needle Valves, O, 1, 18, 20, and 26 Series	MS-01-164	NON-COMPLIANT: Cadmium plating on steel fasteners
Springless Diaphragm Valves for High Performance, DP Series	MS-01-165	None present (Notes 1 & 2)
Trunnion Ball Valves, 83 Series and H83 Series	MS-01-166	NON-COMPLIANT: Cadmium plating on steel fasteners
Severe-Service Union-Bonnet Needle Valves, N Series and HN Series	MS-01-168	NON-COMPLIANT: Hexavalent Chromium present in aluminum actuator components and Cadmium plating on steel fasteners
Diaphragm Valves, LD Series	MS-01-172	None present
SAF 2507 Super Duplex Weld Fittings	MS-01-173	None present
Swagelok Gaugeable SAF 2507 Super Duplex Tube Fittings	MS-01-174	None present
Check Valves, C, CA, CH, CP, and CPA Series	MS-01-176	NON-COMPLIANT: Products that contain BN-60-OR-009 (DEHP)
Sample Cylinders, Accessories, and Outage Tubes	MS-01-177	NON-COMPLIANT: Cadmium plating on End Caps and neck rings
Tubing Tools and Accessories	MS-01-179	OUT OF SCOPE: Tools and accessories
Hose and Flexible Tubing	MS-01-180	NON-COMPLIANT: Hexavalent Chromium in Lanyard tag crimp OUT OF SCOPE: Tools and accessories
Stainless Steel Seamless Tubing and Tube Support Systems	MS-01-181	None present
Ultrahigh-Purity (UHP) and High-Purity Stainless Steel Tubing	MS-01-182	None present
Bellows-Sealed Valves, B Series	MS-01-22	NON-COMPLIANT: Indicator switch used with actuator (Note 2)
Bellows-Sealed Metering Valves, BM Series	MS-01-23	NON-COMPLIANT: Hexavalent chromium on handle, barrel and set screws
VCR® Metal Gasket Face Seal Fittings	MS-01-24	OUT OF SCOPE: Installation tool and tray
VCO® O-Ring Face Seal Fittings	MS-01-28	None present
Ultra-Torr® Vacuum Fittings	MS-01-32	None present
Electric Actuators	MS-01-35	NON-COMPLIANT: Cadmium plating on steel fasteners
Bellows-Sealed Valves, H and HK Series	MS-01-36	None present (Note 1)
Bellows-Sealed Valves, U Series	MS-01-38	None present

Table 1 (cont.)

All products in the listed catalogs are compliant with the material restrictions of the RoHS Directive (2015/863/EU) unless otherwise indicated in the table.		
Catalog Description	Catalog #	Out of scope or non-compliant products
Nonrotating Stem Needle Valves, D Series	MS-01-42	NON-COMPLIANT: Cadmium plating on steel fasteners
Rising Plug Valves, 4P and 5P Series	MS-01-49	None present
Gauge Valves	MS-01-52	None present
Toggle Valves	MS-01-54	NON-COMPLIANT: Pneumatically actuated version
PFA Plug Valves, 43 Series	MS-01-56	None present
Plug Valves, P4T and P6T Series	MS-01-59	None present
Bleed Valves and Purge Valves	MS-01-62	NON-COMPLIANT: Cadmium plating on steel components including fasteners
PFA Needle Valves, 4RP Series	MS-01-69	None present
Diaphragm Valves, DL and DS Series	MS-01-73	None present
High-Pressure, Pneumatically Actuated Bellows-Sealed Valves, HB Series	MS-01-76	None present (Notes 1 & 2)
Screwed-Bonnet Needle Valves, JB Series	MS-01-84	None present
Screwed-Bonnet Needle Valves, JN Series	MS-01-85	None present
Leak Detectors, Lubricants, and Sealants	MS-01-91	None present
Filters, FW, TF, and F Series	MS-01-92	None present
Heat Exchanger Tube Plugs	MS-01-93	NON-COMPLIANT: Lead in Carbon steel components
Bellows-Sealed Valves, BN Series	MS-01-94	None present (Notes 1 & 2)
Lift Check Valves, 50 Series	MS-01-98	None present
D60 Series Distribution Block Valves	MS-02-02	None present
Bellows-Sealed 3-Valve Manifold	MS-02-007	None present
Instrumentation Blowdown Valves, 6DB Series	MS-02-118	NON-COMPLIANT: Cadmium plating on steel fasteners
Stainless Steel Tubular Fittings, Ultrahigh-Purity and Chemically Cleaned and Passivated	MS-02-125-SCS	None present
Modular Surface-Mount Components and Seals	MS-02-135	NON-COMPLIANT: Hexavalent Chromium on substrate. See other products/catalogs in this letter for valves, regulators, pressure gauges, and other accessories.
Actuated Ball Valve Selection Guide	MS-02-136	NON-COMPLIANT: Cadmium plating on steel fasteners and components
Swagelok SAF 2507 Super Duplex Tubing	MS-02-151	None present
Ultra-High Purity Gas Filters, SCF Series	MS-02-156	None present
High-Flow, Manual Gas Pressure Regulators, HF Series	MS-02-157	None present
Pressure Transducers, Ultrahigh-Purity, PTU Series	MS-02-162	Not evaluated
Pressure Gauges, Ultrahigh-Purity and Clean Dry Air	MS-02-163	None present
Pressure Gauges, Industrial and Process, PGI Series	MS-02-170	None present
Ultrahigh-Purity Fluoropolymer Diaphragm Valves, DRP Series	MS-02-171	None present
Gaugeable Chromatograph and Column End Fittings	MS-02-173	None present
T2, TT2 Series Stream Select, Switching, and Shutoff Valve Assemblies	MS-02-174	None present
Valve Lockout Accessory	MS-02-18	None present
Modular Platform Components (MPC)	MS-02-185	NON-COMPLIANT: Hexavalent chromium present in aluminum substrate components
Multi-jacketed Tubing, Single-Jacketed Tubing, and Insulated Tubing	MS-02-188	Not Evaluated
Swagelok Products Compliant With The Transportable Pressure Equipment Directive (TPED)	MS-02-193	NON-COMPLIANT: Cadmium plating on steel fasteners, Cadmium plating on end caps and neck rings
High-Purity PFA Fine Thread Flare Fittings	MS-02-195	None present

Table 1 (cont.)

All products in the listed catalogs are compliant with the material restrictions of the RoHS Directive (2015/863/EU) unless otherwise indicated in the table.		
Catalog Description	Catalog #	Out of scope or non-compliant products
Ultra-high-Purity Fluoropolymer Tubing	MS-02-196	Tools have not been evaluated
Flange Adapters	MS-02-200	None present
Distribution Manifold, J6 Series	MS-02-214	None present
Forged-Body Needle Valves, 10 000 psig (689 bar), F10 Series	MS-02-215	None present
Steam Trap Test Station with Universal Mount	MS-02-221	NON-COMPLIANT: Cadmium plating on steel fasteners
Industrial Pressure Transducers, S Model, E Model, T Model	MS-02-225	Not evaluated
Pressure Regulators, K Series	MS-02-230	NON-COMPLIANT: Antitamper and factory set options contain lead See Appendix A for additional exceptions Currently evaluating KEV for RoHS
High-Flow Springless Diaphragm Valve, DF Series	MS-02-24	None present (Notes 1 & 2)
60 Series Ball Valve Vent Options	MS-02-28	None present
Ultra-high-Purity Valves for Atomic Layer Processing	MS-02-301	NON-COMPLIANT: Optical Position Sensors and Optical Sensor Amplifiers contain lead For valves with actuators: (V) option is not compliant, (S) option is compliant, (SL) option is compliant.
Swagelok Alternative Fuel Service (AFS) Ball Valves for High-Pressure, High-Flow Applications	MS-02-303	NON-COMPLIANT: Cadmium plating on steel fasteners
General Utility Service Needle Valves, GU Series	MS-02-312	None present
Pre-Insulated Tubing Bundles, Light, Heavy, and Electric Traced	MS-02-316	Not evaluated
Ultra-high-Purity Fluoropolymer O-Ring Free Check Valve	MS-02-320	OUT OF SCOPE: Tube Flaring System
DP Series Springless Diaphragm Valves (1.125 in.)	MS-02-325	None present
Stream Selector System for Process Analyzer Applications, SSV Series	MS-02-326	None present
One-Piece Instrumentation Ball Valves, 40G Series and 40 Series	MS-02-331	NON-COMPLIANT: Cadmium plating on steel fasteners
Gaugeable Alloy 400 Mechanically Attached Pipe and Tube Fittings	MS-02-332	OUT OF SCOPE: Tools
Pressure Gauges for Panel Buildings, PBG Series	MS-02-333-E	None present
Process Interface Valves, Kenmac Series Process Interface Valves and Process and Instrument Monoflanges	MS-02-340	None present
Swagelok Welding System, M200 Power Supply	MS-02-342	None present
DN Series valve	MS-02-344	Not evaluated
Variable Area Flowmeters, G Series and M Series	MS-02-346	Not evaluated
Temperature Measurement Devices, Bimetal Thermometers and Thermowells	MS-02-353	Not evaluated
Compact Gauge Valves for Gauge Isolation and Venting	MS-02-355	NON-COMPLIANT: Cadmium plating on steel fasteners
Bleed Valves, Special Alloy Materials, BV Series	MS-02-356	None present
Trunnion Ball Valves, Special Alloy Materials, 83 Series	MS-02-357	None present
Fluid Distribution Header, FDH	MS-02-358	LPH header is compliant. Reference individual product series.
Dielectric Fittings	MS-02-36	None present
Pressure Gauges, General Purpose Gauge with ECE R110 Approval, PGN Series	MS-02-363	None present
Positionable Pressure Gauges, PPG Series, Models B, P, and S	MS-02-364	None present
Severe-Service Union Bonnet Needle Valves, Special Alloy Materials, N Series and HN Series	MS-02-365	NON-COMPLIANT: Cadmium plating on steel fasteners

Table 1 (cont.)

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Catalog Description	Catalog #	Out of scope or non-compliant products
Springless Diaphragm Valves (1.125 in.) for Modular Gas Systems, DE Series	MS-02-366	None present
Automatic ID Purge Control	MS-02-367	None present
B Type VCO L-Ring Face Seal Fittings	MS-02-40	None present
Tube Facing Tools	MS-02-426	None present
Pressure Regulators, RHPS Series	MS-02-430	NON-COMPLIANT: Antitamper and factory set options contain lead
Tank Blanketing Pressure Regulators, RHPS Series	MS-02-431	NON-COMPLIANT: Antitamper and factory set options contain lead
Proportional Safety Relief Valves, PRV Series	MS-02-432	NON-COMPLIANT: Antitamper and factory set options contain lead
Digital Pressure and Temperature Transducers, PTX Series	MS-02-434	None present
Digital Valve Control Module (VCM)	MS-02-435	None present
Sanitary Pressure Regulators, RHPS Series	MS-02-436	NON-COMPLIANT: Antitamper and factory set options contain lead
Jacketed Tube Connector (JTC)	MS-02-438	None present
Special Alloy Ball Valves, 60 Series	MS-02-439	None present
Check Valves, Special Alloy Materials, CH Series	MS-02-440	None present
High-Volume Swaging Unit (HVSU)	MS-02-441	None present
Instrument Manifolds Systems--Instrument, Direct, and Remote-Mount Manifolds and Modular Systems	MS-02-445	Mounting kits and accessories have not been evaluated
Medium- and High-Pressure Fittings, Tubing, Valves, and Accessories catalog	MS-02-472	OUT OF SCOPE: Tools NON-COMPLIANT: Cadmium plating on steel fasteners. Lead Discs on Set Pressure Relief Valves
Medium- and High-Pressure Fittings and Adapters—Alloy Materials	MS-02-474	OUT OF SCOPE: Tools
Intrinsically Safe Pressure and Temperature Transducers, PTX Series	MS-02-475	None present
Intrinsically Safe Intelligent Control Module™ (ICM™) Product	MS-02-476	None present
6-Moly Seamless Tubing	MS-02-478	None present
Fire Series Ball Valves, A60T Series	MS-02-47-E	NON-COMPLIANT: Cadmium plating on steel fasteners
Low Pressure Header	MS-02-480	LPH header is compliant. Reference individual product series.
Subsea Weld Fittings	MS-02-481	OUT OF SCOPE: Tools
General Service Ball Valves, GB	MS-02-484	None Present
Bellows-Sealed Valves for Switching Service, BY Series	MS-02-58	None present
Vertical Flow Sensor, FV4 Series	MS-02-60-SCS	None present
Solenoid Valves For Electropneumatically Actuated Bellows and Diaphragm Valves	MS-02-70	None present
Coaxial Closure Fittings	MS-02-71	None present
Gas Filters, FC Series	MS-02-82	None present
All-Welded Check Valves, CW Series	MS-02-89	None present
Pressure Gauges for the Sanitary Industries, PSD and PSF Series	MS-03-10	Not evaluated
Biopharm Fittings, TS Series	MS-03-13	None present
Vacuum Fittings, Adapter Fittings	MS-03-18	None present
Swagelok KCA Series Continuous Gas Delivery System catalog	MS-18-01-E	Mounting plate is compliant. Reference individual product series.

Note 1:

- Pneumatically actuated ALD, BN, DP, DF and HB Series valves shipped from the factory prior to July 1, 2012 require the suffix code - 20037 to be in compliance with the material restrictions of the RoHS Directive.
- Pneumatically actuated ALD, BN, DP, DF and HB Series valves shipped from the factory after July 1, 2012 are in compliance with the material restrictions of the RoHS Directive as standard (no suffix code required).

Note 2:

- Indicator switches assembled to BK, BN, DP, DF, and HB Series valves shipped from the factory prior to April 14, 2014 are NOT in compliance with the material restrictions of the RoHS Directive.
- Indicator switches assembled to BK, BN, DP, DF, and HB Series valves shipped from the factory after April 14, 2014 are in compliance with the material restrictions of the RoHS Directive as standard.

Please refer to SDS sheets on www.Swagelok.com under “Resources” area, for additional details. Please contact your authorized Swagelok representative for further assistance.

• **Appendix A- Non-Compliant Pressure Regulators**

Pressure regulators with the series, control range, inlet pressure, and Cv (as shown in the table below) do not comply with the material requirements of the RoHS Directive due to the presence of Hexavalent Chromium

Series	Control Range	Inlet Pressure	Cv
KPR, KEV, KSV, KCY, KCM	0-500	6000	0.20
		3600 to 6000	0.50
KLF	0-250	All	All
KHF/ KFB	0-250	All	1.00
KPP, KEV	0-2000	6000	0.06
	0-3000	4000 to 6000	0.20
	0-3600		All
KPF	0-3000	6000	1.00
	0-4000	6000	0.06
			0.20
			1.00
KPB	3000	6000	.06
			.20
	4000	6000	.06
			1.00