Rolling Sphere Technologies Professional Environmental Analysis

Hazardous Substances Compliance Report

Report Generated: 2025-08-22

Metric	Value	
Total Components Analyzed	4	
Compliant Components	1	
Non-Compliant Components	3	
Compliance Rate	25%	
Report Generated	2025-08-22 22:08:57	
Manufacturing Location	Germany	

This report was generated by Rolling Sphere Technologies' Compliance Analysis System © Rolling Sphere Technologies - Professional Environmental Analysis Solutions

Executive Summary

This compliance report analyzes Product 1: cable (Components & Accessories) manufactured in Germany for regulatory requirements in target market(s): United States.

Analysis Results:

Total components analyzed: 4Compliant components: 1Non-compliant components: 3

Compliance rate: 25%

• Overall status: ACTION REQUIRED

IMMEDIATE ACTION REQUIRED

Product Information

Product Description:	cable
Product Category:	Components & Accessories
Product Type:	LED Cables
Expected Volume:	< 1,000 units

Applicable Regulations

Regulation	Authority	Status	Priority
RoHS Directive	Government Authority	Active	Standard
TSCA	Government Authority	Active	Standard
FCC Regulations	Government Authority	Active	Standard
REACH	Government Authority	Active	Standard
Packaging Directive	Government Authority	Active	Standard
California Proposition 65	Government Authority	Active	Standard
EMC Directive	Government Authority	Active	Standard
Radio Equipment Directive	Government Authority	Active	Standard
CPSIA	Government Authority	Active	Standard
WEEE Directive	Government Authority	Active	Standard

Materials Analysis

Detailed analysis of 4 components:

	Component	Substance	Concentration (ppm)	Legal Limit (ppm)	Status	Risk Level	CAS Number	Notes
LO	CD Display 15.6 inc	ch Lead (Pb)	850.0	100 N	ON-COMPLIAN	T High Risk	7439-92-1	Exceeds limit by 750.0 ppm
	Lithium Battery	Cobalt	12000.0	1000 N	ON-COMPLIAN	T High Risk	7440-48-4 E	xceeds limit by 11000.0 ppm
	Plastic Housi Bg or	minated Flame Retard	ants 2500.0	1000 N	ON-COMPLIAN	T High Risk	N/A	Exceeds limit by 1500.0 ppm
	CPU Processor	Gold	45.0	1000	COMPLIANT	Low Risk	7440-57-5	Within acceptable limits

Compliance Summary

Overall Status:	ACTION REQUIRED
Components Analyzed:	4
Regulations Applied:	10
Verified Sources:	65
Analysis Date:	2025-08-22

Specific Recommendations

- 1. Contact Samsung Display about Lead (Pb) levels (850.0 ppm exceeds 100 ppm limit)
- 2. Contact CATL immediately about Cobalt levels (12000.0 ppm exceeds 1000 ppm limit)
- 3. Contact Foxconn about Brominated Flame Retardants (2500.0 ppm exceeds 1000 ppm limit)
- 4. Implement emergency supplier audit for non-compliant components
- 5. Request alternative materials from suppliers within 48 hours
- 6. Conduct dual-jurisdiction compliance review (EU manufacturing + USA market entry)
- 7. Prepare separate compliance documentation for EU and USA requirements
- 8. Schedule urgent review with regulatory compliance team

Regulatory Framework

This analysis covers manufacturing location (Germany) and target market (United States) requirements.

EUROPEAN UNION REGULATIONS (Manufacturing Location: Germany)

RoHS Directive (2011/65/EU)

The Restriction of Hazardous Substances (RoHS) Directive restricts the use of specific hazardous materials found in electrical and electronic products. Applies to products manufactured or placed on the EU market.

Substance	Chemical Symbol	Limit (ppm)	CAS Number
Lead	Pb	1000	7439-92-1
Mercury	Hg	1000	7439-97-6
Cadmium	Cd	100	7440-43-9
Hexavalent Chromium	Cr6+	1000	18540-29-9
Polybrominated biphenyls	PBB	1000	Various
Polybrominated diphenyl ethers	PBDE	1000	Various
Bis(2-ethylhexyl) phthalate	DEHP	1000	117-81-7
Benzyl butyl phthalate	BBP	1000	85-68-7
Dibutyl phthalate	DBP	1000	84-74-2
Diisobutyl phthalate	DIBP	1000	84-69-5

REACH Regulation (1907/2006)

REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) requires companies to identify and manage risks linked to chemicals. For Substances of Very High Concern (SVHC), the threshold for notification is 1000 ppm (0.1% by weight) in articles.

UNITED STATES REGULATIONS (Target Market: United States)

California Proposition 65

The Safe Drinking Water and Toxic Enforcement Act requires businesses to provide warnings about significant exposures to chemicals that cause cancer, birth defects, or reproductive harm. Over 900 chemicals are listed.

TSCA - Toxic Substances Control Act

EPA regulates the introduction of new or already existing chemicals in commerce. Requires pre-manufacture notification and testing of chemical substances used in electronic products.

Regulation	Key Requirements	Substances of Concern
Proposition 65	Warning labels required	Lead, Cadmium, Phthalates, BPA
CPSIA	Lead limit: 100 ppm (children)	Lead in accessible components

TSCA	Pre-manufacture notification	Industrial chemicals
FCC	EMC compliance	RF emissions, safety

This report was generated by Rolling Sphere Technologies Hazardous Substances Compliance Platform.

Report generated on 2025-08-22 22:08:57

CONFIDENTIAL - This document contains proprietary information.

For questions about this analysis, please contact your regulatory compliance team.

This report was generated by Rolling Sphere Technologies Hazardous Substances Compliance Platform.

Report generated on 2025-08-22 22:08:57

CONFIDENTIAL - This document contains proprietary information.

For questions about this analysis, please contact your regulatory compliance team.