

Hazardous Substances Compliance Report

Professional Regulatory Analysis for EU/RoHS/REACH Compliance

[COMPANY LOGO PLACEHOLDER]

Executive Summary

This compliance report analyzes laptop manufactured in Germany for regulatory requirements in target market(s): India, Japan, United States.

- Analysis Results:**
- Total components analyzed: 4
 - Compliant components: 2
 - Non-compliant components: 2
 - Compliance rate: 50%
 - Overall status: **ACTION REQUIRED**

IMMEDIATE ACTION REQUIRED

Business Context

Company Role:	Producer
Company Location:	Germany
Target Markets:	India, Japan, United States
Product Category:	Computing & Telecommunications
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Product Information

Product Description:	laptop
Product Category:	Computing & Telecommunications
Product Type:	Computing & Telecommunications

Expected Volume:	< 1,000 units
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Applicable Regulations

Regulation	Authority	Status	Priority
RoHS Directive	Government Authority	Active	Standard
REACH	Government Authority	Active	Standard
WEEE Directive	Government Authority	Active	Standard
EMC Directive	Government Authority	Active	Standard
Packaging Directive	Government Authority	Active	Standard
Radio Equipment Directive	Government Authority	Active	Standard
India E-Waste Rules	Government Authority	Active	Standard
BIS Standards	Government Authority	Active	Standard
Environment Protection Act	Government Authority	Active	Standard
Hazardous Waste Rules	Government Authority	Active	Standard

Materials Analysis

Detailed analysis of 4 components:

Component	Substance	Concentration (ppm)	Legal Limit (ppm)	Status	Risk Level	CAS Number	Notes
LCD Display 15.6 inch	Lead (Pb)	850.0	1000	COMPLIANT	Medium Risk	7439-92-1	Within acceptable limits
Lithium Battery	Cobalt	12000.0	1000	NON-COMPLIANT	High Risk	7440-48-4	Exceeds limit by 11000.0 ppm
Plastic Housing	Flame Retardants	2500.0	1000	NON-COMPLIANT	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:	23
Verified Sources:	65
Analysis Date:	2025-08-22

Specific Recommendations

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

Multi-Jurisdiction Regulatory Framework

This analysis covers manufacturing (Germany) and market entry requirements for: India, Japan, United States.

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.

INDIA REGULATIONS (Target Market: India)

India E-Waste (Management) Rules 2016

India E-Waste Rules require producers to ensure environmentally sound management of e-waste generated. Extended Producer Responsibility (EPR) obligations apply to all electrical and electronic equipment.

BIS (Bureau of Indian Standards)

BIS mandatory standards apply to electronic products sold in India. Covers safety, performance, and environmental requirements. BIS registration mark is required for market access.

Environment Protection Act 1986

Central legislation for environmental protection in India. Regulates hazardous substances and waste management. Applies to manufacturing and import of electronic products.

Regulation	Key Requirements	Substances of Concern
E-Waste Rules 2016	EPR compliance + Take-back	Heavy metals, plastics
BIS Standards	Mandatory registration	Safety + performance
Environment Protection Act	Hazardous waste compliance	Listed hazardous substances
WPC Approval	Wireless equipment approval	RF emissions, SAR limits

JAPAN REGULATIONS (Target Market: Japan)

Japan RoHS (J-Moss)

Japan RoHS (J-Moss) restricts hazardous substances in electrical equipment. PSE certification and VCCI approval are required for electronics sold in Japan. MIC type approval needed for telecommunications.

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.

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

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