

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.

- 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 |
| 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 |

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 |
| BIS Registration | Government Authority | Active | Standard |
| WPC Approval | Government Authority | Active | Standard |
| TEC Approval | 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: | 13 |
| 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

Regulatory Framework

This analysis covers manufacturing location (Germany) and target market (India) 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.

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 |

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