

Restriction of Hazardous Substances (RoHS) Compliance and Declaration Policy

Overview

This document is for all Oracle Suppliers with appropriate AQP access, seeking requirements related to RoHS compliance documentation.

Audience

This document is for all Oracle Suppliers seeking requirements related to RoHS compliance documentation.

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INTRODUCTION

Purpose

This document defines Oracle's top-level requirements for collecting and archiving RoHS compliance information for systems, sub-assemblies, components, and materials used in Oracle's products. Oracle can ask for such information from a supplier, or a supplier can provide it to Oracle and/or Oracle's Contract Manufacturer (CM) in the form of a supplier self-declaration. The required information can also be contained in other such documentation which meets the requirements of this policy, such as a material data sheet.

This document captures the minimum requirements for supplier compliance information for Oracle's parts.

Scope

This document:

- Defines the compliance information disclosure necessary to verify a part's RoHS compliance, before it is added to Oracle's approved manufacturer list (AML) or other component databases

NOTE 1: Compliance information is defined as the minimum set of RoHS attribute data required from a supplier for a sub-assembly, component part, or material used on an Oracle product. This information must be archived in Oracle's Agile and Component and Supplier Management (CSM) databases, and which constitutes a quality record. This data is reviewed by Oracle personnel to ensure compliance with the EU RoHS Directive or other RoHS legislation. It can also be used by Oracle to defend any enforcement action by an EU member state or during an RoHS compliance audit by an Oracle customer.

- Primarily addresses the requirements of the EU RoHS Recast Directive 2011/65/EU (02 Jan 2013 and later) and the Amendment Directive 2015/863 (22 Jul 2019 and later)
- Can be revised or supplemented in the future to address specific requirements for other regional or country RoHS legislation as they are enacted and become effective
- Defines the compliance information that Oracle's suppliers and manufacturers are required to obtain and archive
- Includes current requirements for China RoHS and Taiwan RoHS.
- Does not cover the AML control processes, which is covered in a series of other documents (see **Error! Reference source not found.**, on page 9)

1. OPERATIONAL DEFINITIONS

This document uses the following definitions:

- Agile** (Oracle's implementation) is the system of record for RoHS Compliance status.
- Policy** is a set of top-level requirements detailing individual components of the Oracle RoHS strategy. A policy is a comprehensive document which refers to a number of procedures or requirement specifications.
- RoHS** refers to the EU RoHS Directive and other EU RoHS like regulations related to certain hazardous substances in electrical and electronic equipment and information products.
- Compliance information** is the minimum set of attributes needed to verify that a part is RoHS compliant and includes all applicable exemptions that are taken for a part.

- **Oracle's RoHS requirements** are Oracle's interpretation of the EU RoHS Directive, for both internal and supplier use, as defined in *WWOPS Supplier Engineering: Environmental Specification – Product Compliance*, 914-1742-xx.
- **RoHS Material Declaration** is located in the Oracle implementation of the Agile product.
- **Part** is a component, material, assembly, or sub-assembly which is used in Oracle's products.
- **Approved Manufacturer List (AML)** is a list of manufacturer(s) and their part number(s) that can provide parts to Oracle.
- **Manufacturer Part Number (MPN)** is the supplier's part number for a part. MPN are tracked via the AML.
- **RoHS MD** and other information are stored in Agile for each MPN listed on the AML.
- **MPN** is a manufacturer's part number that is listed on an Oracle AML.
- **Materials Declaration (MD)** is a document which contains the material composition declaration (data) for parts and sub-assemblies.
- **Certificate of Compliance (CoC)** is a certified statement of compliance to a regulatory standard or other requirement. It is often used synonymously with the term 'Materials Declaration' in reference to RoHS within the electronics industry.
- **IPC-1752A** is an industry standard for *Materials Declaration Management*, first published in February 2006 and as modified by IPC in 2010 (IPC 1752A) and later updates. IPC-1752A establishes a standard reporting format for substances listed under the EU RoHS Directive restricted materials. MD provided to Oracle may also list other banned or restricted materials beyond those controlled by RoHS.

NOTE 2: All MDs provided in response to any RoHS legislation are preferred to be in IPC 1752A format. IEC 62474 Material Declaration standard will also be accepted in place of IPC 1752A. Other supplier specific formats could also be accepted dependent on an Oracle RoHS expert's approval.

NOTE 3: Full (100%) material disclosure statements from suppliers may be accepted as acceptable declarations for Oracle RoHS requirements. Such statements must allow an Oracle RoHS expert to determine RoHS compliance and any applicable exemptions that might apply.

2. ROHS COMPLIANCE

2.1 Roles & Responsibilities

2.1.1 Oracle

- Provides Oracle's RoHS requirements to the suppliers.
- Maintains the data per EN 50581.
- Reviews Supplier Material Declaration and approves/disapproves part.

2.1.2 Suppliers

- Provide RoHS MD for parts that are controlled by supplier.
- Provide RoHS MD, including materials used in assembly process, for Oracle buy parts.

- Retain RoHS compliance information for all parts used in Oracle buy parts.
- Obtain and archive RoHS compliance information from supplier's sub-tier suppliers.
- Ensure all parts on their PSL are RoHS compliant and maintain compliance to changes in the RoHS directive.

2.2 Policy Detail

2.2.1 Part Numbering and AML Process Controls

Oracle uses new part numbers to differentiate between non-compliant and compliant parts and products. Form, Fit & Function rules determine that Compliant and Non-compliant versions of the same part can NOT use the same part number.

Oracle uses new part requests to indicate RoHS compliance for parts used on RoHS compliant products, unless all manufacturers' part numbers on existing AMLs already reference RoHS compliant part numbers.

To generate a new AML, the Requester must have RoHS data for the part, and then creates the AML leveraging Oracle's existing AML processes.

NOTE 4: Oracle relies on the supplier or manufacturer's certified declaration that the validity of the data and information provided to Oracle were verified. Refer to [Section 2.2.2, Compliance Information Requirements, on page 4](#), for more details on the certified declaration.

2.2.2 Compliance Information Requirements

For guidance on the required data, refer to the following sections.

2.2.2.1 Supplier Furnished Information

Supplier must notify Oracle of any intended material or part changes that impact RoHS exemption status prior to changes being implemented.

Part changes implemented to support compliance with the current-most revision of RoHS directive must be declared no later than 6 months prior to previous revision directive's withdrawal

In the case of mixed design models, where the supplier is responsible for specifying and sourcing parts of a design, but Oracle specifies certain parts to use in a design, Oracle is responsible for the sourcing and supplier management of those parts it specifies, for example, hard drives and memory commodity parts. Oracle is also responsible for obtaining and archiving MDs for such parts.

In such cases, Oracle does not provide MDs to the supplier for such parts. The supplier's MD to Oracle is relevant only to those parts for which the supplier has design and sourcing responsibility and omits those parts for which Oracle has design and sourcing responsibility. This makes unnecessary for both Oracle and the supplier to obtain and archive MDs for the same parts.

2.2.2.2 Summary Materials Declaration (MD)

Oracle requires suppliers to provide MDs in accordance with the IPC-1752A standard or equivalent formats as described above.

Oracle requires suppliers to provide at least an IPC-1752A Class A (refer to *table 2-1* for material declaration classification), or equivalent, MD for all hardware parts. This includes information on all exemptions claimed for a part.

Oracle requires electrical component suppliers to provide Class B or above, or equivalent, MDs and accepts Class B and above, or equivalent, declarations for any part.

Oracle can request a supplier to provide an MD using the request or response methodology defined in the IPC-1752A standard. Alternatively, Oracle can accept a supplier's self-declaration, for example, posted on the supplier's web site, in accordance with the publication methodology defined in the standard.

Oracle may request suppliers to provide an MD for a specific part or a series of parts on a PDF template in which the Oracle document part number is indicated.

IPC-1752A standard is available from the IPC web site at:

https://portal.ipc.org/Purchase/ProductDetail.aspx?Product_code=1b4982ab-d539-df11-aa66-002219545fd5.

Table 2-1 IPC 1752A - Material Declaration Classification

CLASS	DESCRIPTION	DECLARATION TYPE	DETAILED REQUIREMENTS
A	- Reporting in Query/Reply format	Query/Reply	- Supplier provides responses to standard queries and/or optional custom queries (refer to <i>IPC-1752A</i>).
B	- Material class reporting	Material Class	- Supplier states the amount of different classes of materials within a product.
C	- JIG-101 substance category reporting for the product - Additional substance categories reporting at the product level	Substance summary groups	- Supplier provides mass and/or concentration of JIG-101 (refer to <i>IPC-1752A</i>) substance category at the product level if above thresholds. - Additional substance categories can be added and reported at the product level.
D	- Substances reporting at the homogeneous material level - JIG-101 substances and additional substances are accommodated	Full substances	- Supplier provided location, mass, substances at homogeneous material level.

2.2.2.3 Test Results in Place of MDs

Suppliers may, at their option, provide RoHS test data (gathered per *IEC 62321*). This data can be used to determine RoHS compliance and, if compliance is indicated, can substitute for an MD. The use of exemptions must be contained and explained within the test results.

Test results apply to a single revision level of a component. Any subsequent changes made by the component manufacturer that affect the material set could void the current test results

and require review and explanation before the existing test results can be applied to the new version of the component.

2.2.2.4 Oracle Specifications

If Oracle is purchasing a supplier-owned or supplier-designed assembly for inclusion in an Oracle product, a procurement specification typically defines the Oracle design requirements, including RoHS compliance. Oracle requires an MD for the purchased assembly from the supplier, certifying the compliance level the assembly is designed to meet.

Such assemblies include memory modules (DIMMs), a power supply assembly, or a PCBA, where the supplier is responsible for the design and maintenance of part AMLs.

If a part or assembly is designed by Oracle (where Oracle normally retains the intellectual property [IP] rights for the part, for example, sheet metal parts, plastic parts, and so on), RoHS requirements must be detailed in the -part specification and drawings to ensure that RoHS requirements are passed down to the supplier. [Acknowledgment](#) of these specifications on drawings does not remove the requirement to provide MD's.

The in-part specifications for such parts should include the following text:

'All materials used in the construction of this component/assembly (including raw stock, coatings, hardware, gasketing, and so on) shall comply with the latest revision of *WWOPS Supplier Engineering: Environmental Specification - Product Compliance*, 914-1742-xx.'

If the CM selects the vendor of parts or materials, the CM must ensure that only RoHS-compliant parts or materials are purchased to meet Oracle's generic specification and must be supported by a material declaration.

2.2.2.5 Further Guidance

In general, an MD (or a CoC) is sufficient if it complies with the requirements described in [Section 2.2.2.2, Summary Materials Declaration \(MD\)](#), on page 4, unless Oracle requires one or both of the following:

- Process attributes, such as reflow temperatures
- Tin whisker data for a component, refer to *Global Supplier Management: Specification for the Environment - RoHS Compliant Materials and Qualifications*, 914-1766-xx

Examples:

- If the part is an electrical component that is soldered to a board, Oracle requires the maximum reflow temperature limitations for the part.
- If the part contains pure tin or electroplated tin alloys, Oracle also requires that tin whisker test data be part of the AML request data package. Refer to *Global Supplier Management: Specification for the Environment - RoHS Compliant Materials and Qualifications*, 914-1766-xx.

In such cases, additional part attributes (that is, manufacturing process and tin whisker data) are required.

NOTE 6: These specifications are driven by engineering quality and reliability requirements, and not legal requirements. PDE must consult RoHS specialists in Supplier Management for advice upon instances where additional process attribute data is required.

If any component provided to Oracle, either independently or as part of a larger assembly, contains tin or a tin-alloy electroplated finish, tin whisker testing and mitigation is required, as

specified in *WWOPS Supplier Engineering: Environmental Specification – Product Compliance*, 914-1742-xx.

NOTE 7: All compliance information gathered in accordance with **Section 2.2.2, Compliance Information Requirements**, on page 4, must be submitted with the AML request and must also be archived in CSM.

2.2.3 Archiving Compliance Information

All collected compliance information is stored against its applicable MPN in Oracle's Agile.

As well as archiving compliance information in Oracle's Agile, all detailed component information, for example, PPM data, is archived in the CSM database.

2.2.4 Auditing and Testing Supplier Assertions

As part of Oracle's RoHS compliance strategy, Oracle can perform audits of RoHS compliance and related processes at selected supplier or manufacturer sites.

2.2.5 Materials Composition Testing

Oracle can require third party service providers to perform materials composition testing on selected component parts or materials provided by specific suppliers selected by Oracle, or as a result of random monitoring. Oracle expects its suppliers to take a similar approach at all levels of the supply chain.

2.2.6 Compliance Information Updates

Supplier product and process changes relating to RoHS **must be** communicated to Oracle through Agile Engineering Change Request (ECR) process; reference *WWOPS Corporate ESO: Supplier Chain Product and Process Change Notification (PPCN) Request Procedure*, 923-2465-xx.

Agile Engineering Change Request (ECR) information must be accompanied by an updated MD from the supplier. The MD is required and may be supported by component specification changes or data sheets in order to verify that the change does not impact the RoHS status of the part. For any change to the MD, the new MD must be uploaded to Agile which may require AML and or NPR (New Part number Request) processes. In all cases, updated compliance information must be archived in Agile and CSM.

NOTE 8: If a supplier owns the design and AML for an assembly, and a Part Change Notification is not normally supplied to Oracle, Oracle must be notified through an MD for the assembly when the RoHS status of such an assembly changes. The supplier must retain all information relating to changes in RoHS compliance at the component level.

2.2.7 Communication

Oracle RoHS requirements are communicated via Specification and are accessible to Suppliers via AQP workspace.

This document is published and revision-controlled by Oracle and communicated to suppliers via AQP.

3. CHINA ROHS REQUIREMENTS

Must meet the requirements of Management Methods for Restricted Use of Hazardous Substances in Electronic and Electrical Products ("China RoHS").

- All Oracle top level system products, including any classified as electrical and electronic product (EEP), must include a Substance Disclosure Table to be shipped with the each product.
- All Oracle top level system products, including any classified as electrical and electronic product (EEP), must be labeled with the appropriate China RoHS environment-friendly use period (EFUP) symbol designation.
- If the product supplied to Oracle is ready for use by the end customer, ready for retail sale, is a finished system, and/or classified as electrical and electronic product (EEP) under the China RoHS (for example, keyboard, mouse, monitor, and so on), the supplier must comply with the appropriate China RoHS requirements:
 - The supplier must provide the Substance Disclosure Table.
 - The supplier's product must be labeled with the appropriate China RoHS environment-friendly use period (EFUP) symbol designation.

4. TAIWAN ROHS REQUIREMENTS

Must meet the requirements of Guidance for the reduction if restricted chemical substances in electrical and electronic equipment ("Taiwan RoHS").

- All Oracle top level system products, including any classified as electrical and electronic equipment, must include a disclosure table of the restricted substances on the body, packages, stickers, or the instruction books.
- All Oracle top level system products that are in scope of the [Taiwan Inspection Requirements for 6 kinds of IT/AV products](#) must have an "RoHS" or "RoHS(XX,XX)" under or beside the commodity inspection mark (examples below) either on the product, on the packaging or in the accompanying documentation.



If the product supplied to Oracle is ready for use by the end customer, ready for retail sale, is a finished system, and/or classified as electrical and electronic equipment under the Taiwan RoHS (for example, printers, monitor, and so on), the supplier must comply with the appropriate Taiwan RoHS requirements:

- The supplier must provide the substance disclosure table of "the presence conditions of the restricted substances".
- Products that are in scope of the [Taiwan inspection requirements for 6 kinds of IT/AV products](#) must have an "RoHS" or "RoHS(XX,XX)" under or beside the Commodity Inspection Mark.

RELATED INFORMATION

Reference Documents and Records

Document Title	Number	ESO Controlled ¹		Quality Record ²	
		Yes	No	Yes	No
WWOPS Supplier Engineering: Environmental Specification - Product Compliance	914-1742-xx	X			X
Global Supplier Management: Specification for the Environment - RoHS Compliant Materials and Qualifications	914-1766-xx	X			X
WWOPS Approved Manufacturer List Change Notifications for Joint Design Manufacturers/Original Design Manufacturers	917-1960-xx	X			
WWOPS Corporate ESO: Supplier Chain Product and Process Change Notification (PPCN) Request Procedure	923-2465-xx	X			
Specification for Marking of Packaging Materials	425-1228-xx		X		X
IPC web site: https://portal.ipc.org/Purchase/ProductDetail.aspx?Product_code=1b4982ab-d539-df11-aa66-002219545fd5	N/A		X		X
Electrotechnical products – Determination of levels of six regulated substances (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers), IEC 62321	N/A		X		X
EU Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (recast) (EU RoHS Recast Directive)	N/A		X		X
EU Amendment Directive 2015/863	N/A		X		X
EN 50581	N/A		X		X
Material declaration for products of and for the electrotechnical industry: IEC62474	N/A		X		X
Material Declaration Management, IPC-1752/1752A	N/A		X		X
Management Methods for Restricted Use of Hazardous Substances in Electronic and Electrical Products (China RoHS)	N/A		X		X
Guidance for the reduction of the restricted chemical substances in electrical and electronic equipment (Taiwan RoHS)	N/A		X		X

¹ All references to documents controlled by Engineering Services were current when this document was released.

All hard copies of this document are to be used for reference only.

² For quality record information, refer to WWOPS Quality: Control of Quality Records, 923-1764-xx.

Document History and Approvals

Dash	Rev	Date	Description of Change	Originator
01	A	25 Jul 2005	Initial release.	N/A
02	A	11 Jan 2006	Changed DE to PDE throughout the document; Updated Scope: removed second bullet from end; Updated Section 1: fourth bullet; Updated Section 2.1.6: Second sentence; Updated Section 2.1.11: last sentence; Updated Section 2.2.1: Step 3; Updated Section 2.2.2, through Section 2.2.4, Updated Section 2.2.7: Added second sentence.	N/A
03	A	13 Nov 2006	Updated the Purpose and Scope sections. Updated Section 1. Updated sections 2.1.1 and 2.1.6. Deleted sections between the present sections 2.1.7 and 2.1.8. Updated sections 2.1.8, 2.2.1, 2.2.2.1, 2.2.2.2, 2.2.2.3, 2.2.2.4, 2.2.3, and 2.2.5. Deleted section between the present sections 2.2.5 and 2.2.6. Updated sections 2.2.6 and 3.	N/A
04	A	23 Jan 2007	Added Appendix A and references in Operational Definition section pointing to Appendix A. Added Specification for Packaging Material Identification Marking, 425-1228-xx, to reference documents. Added reference to Specification for Packaging Material Identification Marking, 425-1228-xx in Packaging Operational Definition section.	N/A
05	A	18 Jul 2011	Changed Sun to Oracle and AVL to AML throughout the document and deleted obsolete references.	N/A
06	A	16 Nov 2011	Complete re-write to bring document up to latest specifications and requirements.	N/A

Agile History

Rev	Date	Description of Change	Originator
07	13 Dec 2013	Revised to add Operational Definitions, clarify and simplify roles and responsibilities for both Oracle and Supplier. Clarify process with respect to Part numbering, AML and Material Declarations including updates and communication. Add clarity around China RoHS and general layout changes.	N/A
08	30 Nov 2015	Removed the word "not" from Note 3 - 100% declarations are acceptable for RoHS. In Reference Documents section: JIG 101 reference replaced by IEC 62474 Standard. Removed EU Directive 2002/95/EC in reference doc list.	N/A
09	16 Sep 2016	Added EU Amendment Directive 2015/863 to the Scope. Updated China RoHS requirements and added Taiwan RoHS requirements. Removed Oracle internal responsibilities. Removed Oracle internal term IPN. Updated web link for IPC-1752A. Updated reference list: removed EU Directive 2002/95/EC, added Amendment Directive 2015/863, removed internal document 7059832, updated reference to China RoHS and added reference to Taiwan RoHS.	N/A
10	14 Apr 2022	Convert to corporate template	N/A

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