



#201

Material Declaration Training

Selecting a Reporting Option

This 'Quick Start' guidance can be used by you, colleagues and suppliers to quickly understand the basics of selecting a Material Declaration (MD) reporting option for your parts

Courtesy of RoHS Ready LLC. www.RoHSReady.org +1 (262) 325.9564
You are licensed to use slides if not altered or charging a fee.

Material Declaration Training

100 Series: Material Regulations

Regulation Overviews
RoHS
REACH
Conflict Minerals
CA Prop 65
Canada DSL

200 Series: Reporting Parts

Workflow & Examples
Reporting Options
Report Training & Templates
Supplier Data Requirement
Letter Templates
Supporting Details

You
Are
Here

300 Series: Project Management

Assessment
Planning
Execution
Simplified Reporting
Advanced Techniques
Additional Resources

Training materials may be found on the web page:

<http://rohsready.org/training.html>

Roster of Training – 200 Series

Reporting Material Declarations

#200 - Reporting a Part (Item)

#201 - Selecting a Reporting Option

You are Here

#202 - Reporting in FMD Format

#203 - Reporting in Specific MD Format

#204 - Template for FMD Format

#205 - Template for Specific MD Formats

#206 - Supplier Requirement Letter Template

#207 - Decomposition of BoMs for Items & Building an 'MD BoM'

#208 - Material and Substance Identification & Weights

#209 - RoHS Exemptions

#210 - Substance Not Specifically Reportable

#211 - Reviewing MD inputs from suppliers

#212 - Applicability and Exceptions

#213 - Units Conversion Guide



Definitions

1. **MD – Material Declaration** - Supplier report of material and substances for a part, including all materials/substances from sub-tier supply chain
2. **IPC-1752 A** – Standard for Material Declaration reporting, released in November 2011 – defines classes of reporting per below
3. **FMD – Full Material Declaration (Class D)** is an MD which gives all details of material and substances in a part
also may be called: Full Material Disclosure or
FSD – Full Substance Disclosure
4. **Specific Material Declarations (Class C)** provides a Yes/No (and if Yes, how much) input for material declarations for only the restricted and/or reportable materials or substances in the regulation(s)/requirements of interest
5. **SDoC – Supplier Declaration of Conformance (Class A)** - Simple Yes/No MD without any material / substance detail – does not always meet customer reporting requirements



#201

Selecting a Reporting Option

This guidance will help you select the reporting option for your Material Declaration (MD) data collection

Key topics:

Reporting Options
Full Material Declaration (FMD)
Regulation Specific MD (Regulation MD)
Selection Guidance & Examples

Note - #2XX annotations indicate training module for further details



MD Reporting Options

Full Material Declaration (FMD)

(Ref: IPC-1752A, Class D)

Preferred and durable

or

Regulation Specific Material Declaration

(Ref: IPC-1752A, Class C)

Acceptable, but will require updating

- Both meet the IPC-1752A data standard
- Regulation Specific MD meets mandatory minimum reporting



FMD - What is FMD ?

Full Material Declaration (FMD) (or Full Material Disclosure) is the required / preferred* reporting format (1 document, 1 time)

*Note – more Customers are making this mandatory for their suppliers

FMD is reporting which:

- Captures the full material and substance content detail of an item to meet requirements for reporting any and all regulations.
- Enables Customers / users of the item to analyze this reporting for content of any restricted or reportable substances and/or materials
- Is defined in the IPC-1752A data standard, Class D

FMD is considered a ‘durable’ report

- Does not require updating for regulation changes in their materials and/or requirements



FMD - Customer Requirement

Full Material Declaration (FMD)

Sample customer requirement language

Customer requires that all suppliers provide Material Declarations (MD) for the parts / assemblies they provide to *Customer*. This includes material and substance information from all sub-tier suppliers down through the supply chain.

Supplier is to provide Material Declarations as FMD - Full Material Declaration (Class D). If a supplier is unable to meet this requirement, *Customer* will accept a Regulation Material Declaration (Class C), for a limited time (date). If a supplier is unable to meet either of the above requirements, *Customer* will accept an SDoC - Supplier Declaration of Conformance (Class A), as an interim response for a limited period of time (date).

Suppliers are expected to build the capability to provide Full Material Declarations. In the near future (date), *Customer* will cease to accept lesser levels of MD. This approach lowers the cost and effort of compliance for *Customer* and suppliers by reducing the need for follow-up information reporting, which is driven by the constantly changing regulatory requirements.



FMD Benefits vs. Effort

FMD is Best Long Term Approach

(+++)
Avoid reviewing 100's of REACH* substances every 3-6 months

(++)
Reduced impact from future regulation adds or changes

(++)
Reduced update requirements from Customers to suppliers

(+)
Reduced number of forms required

(-)
Potentially higher effort to initially produce

* and any similar reportable substances



2 Helpful Reporting Rules

Allowance for **'Not Specifically Reported'**

There is an allowance for up to 10% (or 5%) of the weight of a part which can be classified as (any of):

Unknown - Not specifically known by a Substance CAS #

Proprietary - Contains proprietary material(s)/substance(s)

Un-determined – Specific materials/substances not known

Allowance helps enable FMD reporting

- See FMD reporting detail guidance on how to report these situations - #210



2 Helpful Reporting Rules (cont.)

‘Use of Available Information’ for parts and materials

Material data may be taken from all available design, specification, existing material certifications, standards, and process documentation

- No specific material testing or lab analysis is required, unless specifically required



- This does not supersede any more stringent Quality Plan requirements for material / traceability reporting



Can I Report FMD?

Reporting Capability Assessment

Can determine all* materials to lowest substance level

- Provide: **FMD - Full Material Declaration** (Class D)
*Within the 10% 'Not Specifically Reported' allowance

Preferred

1 document
1 time

Can determine and provide distinct Y/N presence of each RoHS/REACH Substance

- Provide: **Regulation Specific Material Declaration** (Class C)
- Part compliance per substance (Y/N)

Required Minimum

2+ documents
many updates

~~Can determine and state overall absence /presence of RoHS & REACH~~

- ~~• Provide: RoHS SDoC & REACH SDoC~~
- ~~• Minimal Declaration~~
- ~~• Part compliance overall (Y/N)~~

Does Not always Meet

Regulation Specific MD - an Alternative



If you cannot accomplish FMD reporting,
your Customers may allow* the following regulation specific
material declarations (multiple documents, multiple times):

- RoHS Material Declaration** – if required
- REACH Material Declaration** – if required
- California Prop 65 survey / declaration** – if required
- Canada DSL** – if required

*likely only for a limited amount of time

Regulation Specific MD - an Alternative



- Regulation Specific Material Declarations provides a Yes/No (and if Yes, how much) response for material declarations for the restricted and/or reportable materials/substances within the regulations in scope for you/your Customer
- Regulation Specific MDs report the required minimum info
- Defined in IPC-1752A, Class C
- Regulation Specific Material declarations only report on the required substances and requirements at a point in time
 - Requires continual updates when regulations or requirements are updated
 - Not 'durable'



Additional Separate Reporting

Your Customers may require the following additional deliverables:

- Conflict Minerals Survey (CMRT)
- Battery Information (if item is or contains a battery)
- Customer specific restricted or reportable materials



Special Situations

- **Review your part #s for Applicability and Exceptions per #212**
- **If you already have a standardized reporting format** or already report on a global standard format (IPC-1752A or similar), ask your Customer if they can accept your data in the existing format
- If you have **product family part #s** - identical in material content, consider a method for streamlining this reporting



Reporting Selection Examples

Key Considerations:

- Number of Materials and Substances in part
- Common / Catalog item or Custom

Examples:

- 1) Simple mechanical assembly - staple remover:
7 Materials, 21 Substances, catalog item (#207)
- 2) Complex electro-mechanical assy. – drive motor
65 materials, 300 Substances, catalog item
- 3) Complex high level assy. – computer workstation
> 200 materials, > 800 substances, configured item

Suggested
Reporting
Option

FMD

Regulation
Specific
MD*

Regulation
Specific
MD*

*work toward FMD long term, but submit Regulation Material Declarations for now



Reporting Situation Example

Sub-tier suppliers have provided a mix of FMD and Regulation Specific MD for the parts in an assy. What options do you have?

1 - Try to help supplier(s) who reported Regulation Specific MD upgrade their reporting to FMD

2 - If the total weight of the parts where Regulation Specific MD was reported is <10% of the total weight of your assembly, you can utilize the 'not specifically reported' allowance and still report your assembly at FMD

3 – If the items where only Regulation Specific MD was provided are available from another source who can provide FMD, carefully consider changing suppliers



Select Reporting Format

Select reporting format: FMD or
Regulation Specific MD

See outline on following slide

Proceed to the corresponding reporting guidance:

- **FMD** - Reporting Guide (#202) & Template (#204)
- **Regulation Specific MD** - Reporting Guide (#203) & Template (#205)



Report Format Selection Steps

- A. Review Bill of Materials for the parts within your item(s), down to sub-Tier suppliers and materials within their parts
- B. Assess your and your sub-tier suppliers capability to specifically identify all of the substances within the materials
- C. Review / utilize all documentation already in hand or directly available
 - i. Drawings, Specs, Material Certs, etc
 - ii. Material info available on Sub-tier supplier Web site
 - iii. Material Content per global or regional material standards
 - iv. Consider utilizing outside data sources
- D. Consider the 10% not specifically reported substance allowance. This provides some flexibility to select and execute Full Material Declaration (FMD) at supplier level
- E. **Select your MD reporting format**
(using different options on separate parts is acceptable)
 - i. Full Material Declaration (FMD)
 - ii. Regulation Specific Material Declarations
- F. Send data requirement to sub-tier suppliers based on steps C and E
 - i. Utilize requirement letter templates (#206)