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# FAQ Pertaining to the ARRIS Controlled and Reportable Materials Disclosure specification

## **If raw materials of a part are sourced from two suppliers but with measurable differences, how should the material disclosure be made?**

The weighted averaging approach is not preferred. First, any substances on the controlled list should be listed in worst case (highest value) among the two raw materials. Then, any substances on the reportable list should be listed in worst case (highest value). Next, adjust remaining non-reportable material of highest value downward as required to achieve measured part mass. This approach most correctly reports worst case for future use and avoids issues with possible noncompliance due to source raw material variations.

## **What is the best way to analyze and report a coating film or solder on components?**

As it is difficult to disjoin and analyze coating and solder from other material, material suppliers should provide us with data on the solder paste or paint as received. But for such materials, the exact chemical composition of the components is different before and after spraying or print application and reflow manufacture. For coating where a carrier or solvent evaporates, you may have to measure thickness with a gauge or cross section and report the actual material left after processing. This may be the same as the percent of solids used in the paint industry. If paint reacts upon curing it should be the cured state that is reported. For solder paste, flux will be gone after reflow so report based on mass and composition of the metals in the alloy. ARRIS is not looking for any greater detail than just finished part data, not part manufacturing process data.

## **If the concentration of one controlled or reportable substance is below the ARRIS reporting threshold, do suppliers need to report that data?**

Section 5.1.2 of the ARRIS Controlled and Reportable Materials Disclosure specification requires

the reporting of "all controlled and reportable substances with concentrations in excess of the reporting thresholds noted in Appendix A." For example, if the concentration of Chromium VI (Cr VI) compounds in one homogeneous material is 80 parts per million (ppm) and its reporting threshold in Appendix A is 100 ppm, then should the supplier enter "80 ppm" in the Material Declaration reporting form? Or, can they choose to not report the Cr VI since it is below the required reporting threshold? The supplier is not required to report any levels below the reporting thresholds in Appendix A. However, if you do report the data, it will not have any negative effect on the compliance decision.

### **If the concentration of a substance is extremely low or can be labeled as "not detected," how should material disclosure be made?**

In Appendix A of the ARRIS Controlled and Reportable Materials Disclosure specification, "all controlled and reportable substances with concentrations in excess of the reporting thresholds noted in Appendix A.". However, in one testing report, if the concentration of one substance is less than 2 ppm, it will be labeled as "not detected." How is the material disclosure made in this case? For example, if the presence of chlorofluorocarbons is listed as "not detected," can suppliers fill in the Material Declaration form with "chlorofluorocarbons: 0 ppm"? What if a spot test is done and a trace amount, such as 0.1 ppm, of chlorofluorocarbons is present? Will the supplier be penalized or found noncompliant? ARRIS recommends that suppliers do not need to report not-detected substances if the detection limit is low. To date, the not-detected allowable limits have not been defined but technical guidance says that anything less than 10 ppm that is not intentionally added to the material does not have to be reported. A better interpretation of this definition is being discussed. In any case, suppliers should file all test results and document the test methods since these may later provide valuable details.

### **Are engineering calculations accurate enough for reportable materials testing?**

Reportable materials are much less critical because at this time there are not any known legal restrictions against their use. ARRIS does not require a supplier to test for all substances on the reportable list at this time. Most parameters should be known by materials properties available to supplier and sub-suppliers and reported by engineering calculation.

### **If an X-ray test returns a "not detected" result, do suppliers need to use a more accurate method to get an exact concentration?**

X-ray fluorescence (XRF) testing is useful in screening for many elements, while engineering knowledge also can help to identify others. International Electrochemical Commission (IEC) standards eg: IEC62321 may be referenced to provide detailed guidance on further analytical testing.

### **Should the presence of a restricted substance in paint (prior to processing) from a supplier be reported on the IPC 1752A?**

A material safety data sheet (MSDS) obtained from a paint supplier indicates the presence of a



restricted substance that exceeds ARRIS's reporting threshold. The paint, prior to spray application onto a plastic substrate, contains 2.1 percent of Ethylene Glycol Monomethyl Ether and its acetate. This exceeds the ARRIS reportable limit of 5 ppm. According to ARRIS CONTROLLED AND REPORTABLE MATERIALS DISCLOSURE SPECIFICATION specifications and the Compliance Connect report, process chemicals and other substances that do not remain with the part received by ARRIS should not be included. Often, the solvents in paint evaporate during processing and no longer remain in the paint film. So, if the substances have completely evaporated from the coating during processing, these chemicals do not have to be reported to ARRIS. However, if tests of the finished part show the restricted substance is still present in the coating in an amount at or above the reportable level for that chemical, then it should be reported.

### **How long do suppliers have to complete 1752A e-form requests?**

When a Supplier Part Request is received from ARRIS, there will be a specified due date in the request. Unless specified, the Material Declaration is due within two weeks.

### **For each sector within ARRIS, typically who is in charge of the compliance process?**

At ARRIS, the Environmental Data Management team is typically responsible for getting the IPC 1752A form; and making sure their products are compliant.

### **Is the information provided by suppliers in the 1752A legally binding?**

When certified and exported, the 1752A file is a legal document. ARRIS relies upon the information provided by suppliers in order to ensure compliance with regulatory and voluntary commitments.

### **Is this declaration legally binding?**

Yes, selection of Accepted in the ARRIS IPC Creator©, forms signifies a legal declaration

## **General Questions:**

### **What does WPA stand for?**

It stands for Windchill Product Analytics, developed by Product Technology Corporation (PTC)

### **What kind of email notifications will I receive from ARRIS?**

Currently Suppliers only receive email notification if there is an error in their XML file and it cannot be loaded. This may change in the future

## **Questions Concerning File Submissions**

**Do Suppliers have to do anything after emailing file submissions?**

No. The ARRIS Env.Comply@arrisi.com email box is fully automated. This is why it is so important to follow the naming conventions covered by the ARRIS training material under the Submitting Material Declarations section. Actions do need to be taken if an email failure notice is provided by ARRIS

**Is there a limit to the number of files that can be submitted on one email?**

Yes. Up to 10 Material Declaration files can be submitted on one email in uncompressed format

**How can I submit more than 10 files at once on one email?**

To submit more than 10 files on one email, they can be compressed to a Zip file. Note that all Zip files must end with the extension “zip” to be acceptable, and MUST have 1752 in the zip file name!

**What is the largest file size for a Material Declaration that can be accepted by WPA?**

The largest single sized file is 5 MB.

**What is the largest file size I can send to the Supporting Materials email addresses?**

ARRIS recommends limiting the combined attachment size to 10mg. If the total of all attachments is larger than 10mg, please split them into more than one email

**Is there a special naming convention for XML file submissions?**

Yes – the ARRIS training material provides detailed information under the Submitting Material Declarations section. Remember, all files related to an email sent to Env.Comply@arrisi.com must have 1752 in the title. Otherwise, the Material Declaration will not be loaded into WPA. Detailed information is available in the ARRIS training material under Submitting Material Declarations

**Is there a special naming convention for Zip file submissions?**

Yes – the ARRIS training material provides detailed information under the Submitting Material Declarations section. If a Zip file is related to an email sent to Env.Comply@arrisi.com, that Zip file must have 1752 in the file name. Detailed information is available in the ARRIS training material under Submitting Material Declarations

**What compressed formats are acceptable to WPA? Can I submit a RAR file?**

No. WPA will not accept a RAR file. The only file compression allowed is Zip format

### **My email client automatically zips file attachments. Is there anything special we should do?**

Yes – since the files related to the submission email sent to Env.Comply@arrisi.com must contain 1752 in the file name, files should be zipped prior to sending the email. Please ensure that the zip file contains 1752 in the file name

### **How will Suppliers receive XML headers?**

The XML header(s) will be sent with the request email. If Suppliers elect to utilize the ARRIS IPC Creator©, a click of a button will load all header information in the tool

### **Should Suppliers send an XML or PDF file?**

Material Declarations should be sent in XML format. The IPC creator output is an XML file, and should be submitted to the email address Env.Comply@arrisi.com

### **Must the XML file sent to Env.Comply@arrisi.com be from the supplier contact email address?**

No. The email can be sent from any address, but the Supplier Contact specified in the email address should be from the individual who completed the Material Declaration. This will allow ARRIS to contact the appropriate person in case of any issues

### **Where should Suppliers send supporting documentation (ie: any correspondence other than XML Material Declaration XML files)?**

The WPA email (Env.Comply@arrisi.com) is automated and will only processes XML files – all other attachments and text will be ignored. Supporting documentation (and any other correspondence) must be sent to EnvInformation@arrisi.com.

### **Whom should Suppliers contact with issues/problems/errors?**

You can always contact the EDM team if you already are in contact with a team member. If not, send an email to EnvInformation@arrisi.com

## **Questions Concerning the new Form**

### **Is the ARRIS IPC Creator© available free of charge to Suppliers?**

Yes. Suppliers who attended webinars received the early version in their attendance confirmation. The latest version of the Creator tool will be available for download on our Material Disclosure website

### **What are Microsoft Excel requirements for the ARRIS IPC Creator©? Will it work for MS Excel 2007/2010?**

MS Excel 2003, service pack 3 or later. It will work with MS Excel 2007 and 2010

**Are IPC-1752 Class 6 forms acceptable as long as exemptions are not needed?**

Yes, IPC-1752 class 5 or 6 are acceptable. In these cases the exemptions would be recognized but not valid for the system

**If a Supplier has questions regarding how the filling out the XML form, who should be contacted to provide help?**

If already working with an EDM team member, they can be contacted directly. If not, send an email to [EnvInformation@arrisi.com](mailto:EnvInformation@arrisi.com)

**Why doesn't ARRIS assign Part Usage, since that information is in the header sent from ARRIS?**

In preparation of go-live, the ARRIS IPC Creator© has had the code locked down. We will consider this enhancement for future versions of the tool

**Can the ARRIS IPC Creator© list all CAS numbers like the current AIAG Compliance Connect does? Can this feature be added?**

We are providing the ARRIS CAS Number Tool to allow easy lookup by CAS# or Substance name. This tool can also be downloaded from the Material Disclosure website

**How many digits will the ARRIS IPC Creator© form allow? For example, if an ink is only .000001 grams, will the form allow values this small? If there are two ingredients in the ink they would be .0000005 g each**

The Creator tool allows 12 digits after the decimal point. In addition, units of milligrams are available in the tool

**Can a Supplier sign this IPC form on behalf of homogeneous supplier?**

No, the supplier does not have enough information to do that. The IPC form must be signed by the original manufacturer

**Is ARRIS requesting the Vendors name and part number for subparts?**

No, just the subpart name, by whatever name the Supplier identifies it. Refer to subpart naming conventions for ODM products in the training material

**What are all these exemption numbers? We have not seen anything like this previously. What laws/regulations require the use of these exemptions?**

The training material on the Material Disclosure website provides both guidelines and detailed instruction on how to apply exemptions. These exemptions allow us to use Controlled Substances under very specific guidelines

**Will the reportable substances be updated on a regular schedule or as regulations change? Is it possible for Suppliers to proactively anticipate when new substances may be added?**

The ARRIS Controlled and Reportable Materials Disclosure specification gets updated periodically driven by regulations, customer requirements, and “Green” initiatives

**Does ARRIS Exemption 501 (Part contains Nickel, but will not have prolonged contact with skin) apply to side keys?**

The exemption that would apply in this case is 506 (Part contains Nickel and could have prolonged contact with skin but the manufacturer certifies it meets EN1811, per 76/769/EEC and 94/27/EC), however, documentation of materials complying with the standard is needed

## Questions Concerning Compliance

**Do I understand that CoA (lab tests) are needed for every chemical in a material? Not just the RoHS 6?**

If you know the material content, no lab tests are required. If not, lab tests need to include ARRIS reportable substances analysis

**Is ISO14001 a requirement?**

It is highly recommended, but is not required

**What is a Class A non-homogeneous disclosure?**

It is a rarely used disclosure type which requires ARRIS business compliance team authorization to use

**Must Suppliers mechanically disjoint color?**

Material should be homogenous (uniform), if the colorant is part of the material, then it is correct to declare it as a pigment in the material. But if the color is a layer, then it must be declared separately

**What if the product is laser marking? How would we report that?**

As in laser marking there is no material involved, you do not have to include it in declaration. You may be contacted by EDM team for clarification

**Is NiPdAu plating on part terminal exempted?**

All materials containing Nickel be evaluated for Nickel ion release per the ARRIS Controlled and Reportable Materials Disclosure specification

**Will ARRIS allow the use of Basic substances such as Acrylic Resin or Epoxy Resin where there is a mixture and no CAS numbers apply to a Basic Substance?**

The system does allow usage of IMDS substances, but we do not recommend it

**For non-listed substances, what would be considered supporting information? Would SGS report be acceptable?**

An example of supporting doc is the MSDS. SGS reports would need to cover all ARRIS Controlled and Reportable substances to be considered acceptable

**Do lab reports have an expiration date? How long are lab test reports valid?**

Test lab reports remain valid as long as there is no change in the composition of the materials being reported on

**What supporting information is needed for MISC substances which being declared over 10%? Does ARRIS have a standard format?**

MSDS's and similar documents may also be acceptable subject to ARRIS approval

**What if there is a trade secret ingredient comprising more than 10% of a material, what does ARRIS require?**

Whenever a supplier cannot report a substance comprising over 10 percent of a material due to intellectual property concerns, it may be necessary to provide the original manufacturer name and supporting documentation which must assure compliance with ARRIS Controlled and Reportable Materials Disclosure specification. This can be through MSDS or other similar sources subject to ARRIS approval.

The substance must be declared as Substance Name = "MISC., NOT TO DECLARE" and CAS# = "SYSTEM".

If the Supplier name is proprietary, a blackened out MSDS form may be acceptable, pending ARRIS approval

**How is volatile material >10% handled?**

Materials declaration should only include what it is delivered to ARRIS; therefore you'll need to adjust percentages of substances in the list according to your manufacturing process. Typically, volatile substances are not part of the final part/product delivered to ARRIS. Volatile substances currently tracked by ARRIS are identified in the ARRIS CAS Tool.

**How do I handle >10 % proprietary materials?**

Any Material containing >10% proprietary (undeclared) data requires a confirmation that no banned, controlled substances, or reportable substances are being used. Supporting documentation may be required.

