



MOTOROLA

**Material Disclosure:
12G02897W18 Specification and
AIAG Compliance ConnectTM**

User Guide

Rev. 7.0
Nov. 1, 2007

Motorola Controlled and Reportable Materials Disclosure – 12G02897W18 Specification and AIAG Compliance Connect™ User Guide

Table of Contents

Website Information	1
Overview	1
Software Requirements	2
Technical Support	3
Reporting Part, Material, and Substance Information	3
Process Flow Diagram	6
Step 1: Download the Compliance Connect Spreadsheet	7
Step 2: Complete the General Information tab	8
Step 3: Complete the Part Tree tab	10
Step 4: Complete the Materials tab	13
Step 5: Complete the Part Detail tab	18
Step 6: Certify and Export	20
Step 7: Submit Data to Motorola	20
Glossary	21
Frequently Asked Questions	23

Tables

Table 1	Data Reporting Structure – Complete BOM
Table 2	Data Reporting Structure – Rolled-Up BOM
Table 3	General Information Tab Fields and Definitions
Table 4	Part Tree Tab Fields and Definitions
Table 5	Materials Tab Fields and Definitions
Table 6	Material Classifications
Table 7	Part Detail Tab Fields and Definitions

Website Information

Throughout this document, reference will be made to Motorola's Material Disclosure Process website. Rather than repeating the reference throughout the document, it is provided below. Please bookmark this link and explore the information on this site carefully as part of your preparation to completing the disclosure paperwork.

<http://www.motorola.com/citizenship/materialsdisclosure>

Overview

This User Guide describes the W18 and the proper completion of Compliance Connect™ reporting form (this version specifically covers version 1.0g). Reporting must use the Compliance Connect™ reporting form which is a data collection tool licensed from Centor Software Corporation. The Motorola specific version is available at Motorola's Materials Disclosure Process website referenced above. Other versions of this form may not be accepted.

On an exception basis only, Motorola may permit the use of the IPC1752 form for disclosure of material content information. Guidelines for the completion of the IPC1752 form, when authorized by Motorola, are available at the aforementioned website.

Motorola policy prescribes the use of the Compliance Connect™ software for collecting the material content of the parts used in its products to determine product compliance, ensure appropriate end-of-life management and to drive a reduction in environmental impact.

Motorola advocates homogenous level reporting of 100% of the material content to ensure compatibility with future requirements and supports the development of industry standard reporting forms to ease supplier burden. Disclosure requirements and substance reporting levels are stated in Motorola's Controlled and Reportable Material disclosure Specification, 12G02897W18, hereafter referred to as W18.

Both as a requirement for the qualification of new parts and to ascertain compliance status of legacy parts, it is imperative that our suppliers respond in a timely manner and provide complete and accurate data to Materials Disclosure requests from Motorola.

When materials are changed on a previously qualified part, the suppliers must notify Motorola in advance of any changes in material content in accordance with Motorola's Part Change Notification (PCN) process.

Software Requirements

Compliance Connect™ is supported for use on the following Microsoft operating systems and Excel versions:

- Windows 2000/Excel 2000 or higher (recommended)
- Windows 2000/Excel 97
- Windows NT/Excel 97 or higher
- Windows 98/Excel 97 or higher

Comment on Language issues – users may have to switch local settings to “U.S. English” when completing this form. In Windows XP, go through “Start”, “Settings”, “Control Panel”, “Regional and Language” options and then select “English (United States).”

Software License Terms

A sublicense for use, copy, and distribution of Compliance Connect™ is granted by the AIAG under a primary license granted to AIAG by Centor Software Corporation. You may use, copy, and distribute Compliance Connect™ with the following restrictions:

1. If you distribute this software, all copies you distribute must contain all files that are in the original distribution unmodified, including all copyright notices.
2. You may not receive any payment or other consideration of any kind for distributing Compliance Connect™, except your actual cost of any media bearing the Software and your actual cost of shipment.
3. You may not reverse-engineer, decompile, or modify Compliance Connect™ code or any other aspect of the spreadsheet.
4. You may use Compliance Connect™ only in connection with collecting and reporting automotive industry supply chain for end-of-life vehicle data. Any other use or modification requires a separate license.

Technical Support

For questions and assistance in completing the Compliance Connect™ spreadsheet, please contact Motorola via the appropriate email address listed at Motorola's Material Disclosure Process [website](#).

In addition to technical support questions, please notify your Motorola contact to update contact information, address questions regarding part status, or inform that you may not meet the established deadline. Communication is crucial to the data collection process

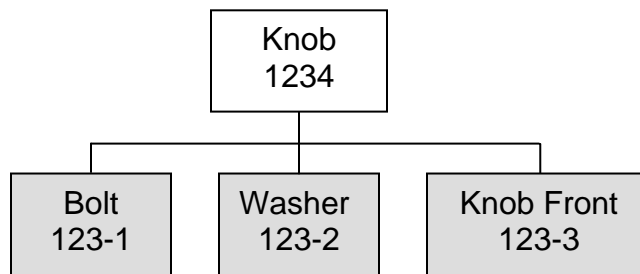
Reporting Part, Material, and Substance Information

There are four data entry tabs (General Information, Part Tree, Material, and Part Detail) in the Compliance Connect™ spreadsheet. An overview of the fields requested on each of the four tabs along with a definition, and indication whether data input is optional or required is provided in Tables 3, 4, 5 and 7. Data must be provided in the proper format for each of the required fields (at a minimum), identified as bold column headings throughout the spreadsheet.

Proper reporting using the Compliance Connect™ spreadsheet will require detailed knowledge of your bill of material (BOM) and how your parts are assembled.

An example of an exploded BOM and an indented BOM for a simple assembly follows:

Exploded BOM



Indented BOM

<u>Assembly Level</u>	<u>Part #</u>	<u>Part Description</u>
01	1234	Knob Assembly
02	123-1	Bolt
02	123-2	Washer
02	123-3	Knob Front

In this example, the Knob Assembly is the saleable part. The Knob Assembly is comprised of three subcomponents (also known as leaf-level parts, or children). Data regarding the saleable part and each of its components are reported on the Part Tree tab.

The Bolt, Washer, and Knob Front are bottom level parts, as they are not comprised of additional parts. The materials of composition are reported for bottom level parts on the Part Detail tab once each unique material type is defined on the Material tab. Defining a material type on the Material tab includes disclosure of presence and concentration of each substance present in the material.

Table 1 summarizes how parts are broken down to subcomponents, subcomponents to materials, and materials to substances for the Knob Assembly example. Note how material weights are equal to the part weights, and substances equal 100% of the material composition.

Table 1 Data Reporting Structure – Complete BOM					
Part #	Part Weight (lbs)	Material Composition	Material Amount	Substance composition	Substance Amount
1234	0.08				
123-1	0.05	Steel	0.04	Iron	90%
				Carbon	5%
				Nickel	3%
				Manganese	2%
		Coating	0.01	Zinc chromate	100%
123-2	0.02	Steel	0.015	Iron	90%
				Nickel	5%
				Carbon	3%
				Manganese	2%
		Coating	0.005	Zinc chromate	100%
123-3	0.01	Wood	0.01	Wood	100%

Motorola suppliers have the option of reporting data for each saleable part in a summarized or “rolled-up” format as long as the materials are reported at the homogenous level (refer to the W18 specification). Rolled-up data requires that the material content be summarized for the top-level or saleable part, rather than breaking down the assembly to its subcomponents. This can be useful if the saleable part is an assembly containing several parts composed of the same homogenous materials. Table 2 displays how rolled-up data would be reported for the Knob Assembly example.

Table 2 Data Reporting Structure – Rolled-Up BOM					
Part #	Part Weight (lbs)	Material Composition	Material Amount	Substance composition	Substance Amount
1234 (Part number for saleable part)	0.08 (Sum of detail component weights)	Steel	0.055	Iron	90%
				Carbon	5%
				Nickel	3%
				Manganese	2%
		Coating	0.015	Zinc chromate	100%
		Wood	0.01	Wood	100%

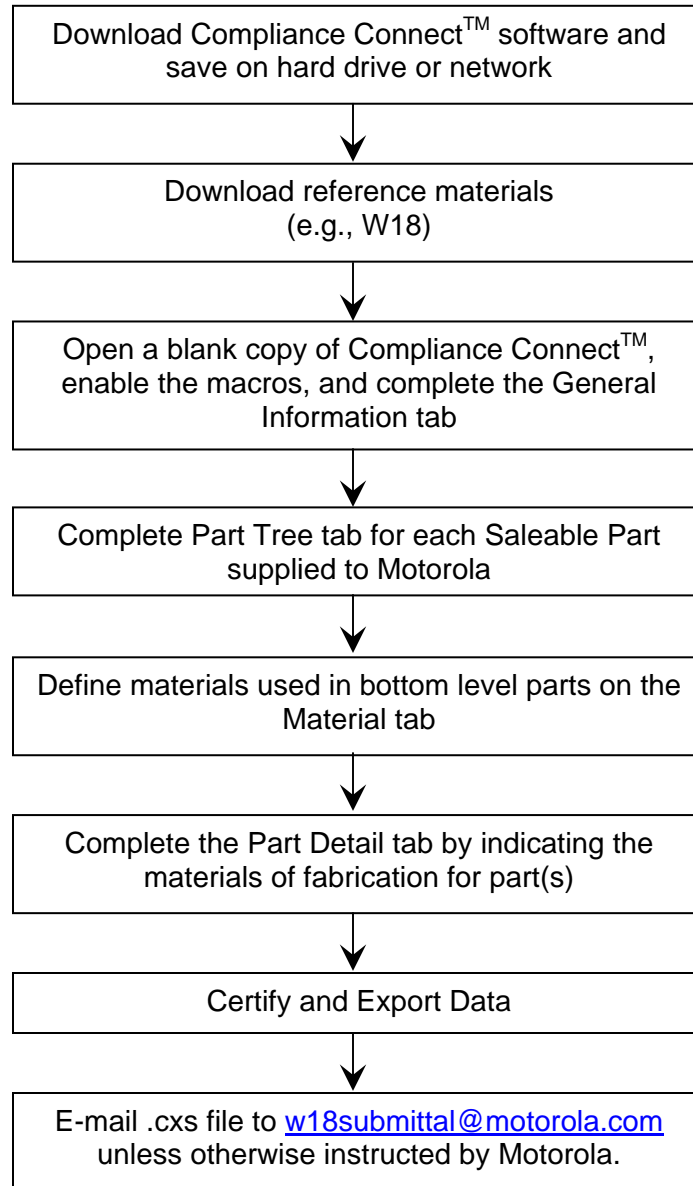
Notice that the sum of material weights is equal to the assembly part weight and that substances equal 100% of the material composition.

Data checks are built into the spreadsheet. Suppliers must check the data for each completed tab by clicking on the green button on the upper left hand corner of the sheet and correct any errors before proceeding to the next tab.

Before you get started, review the reference tabs provided in the spreadsheet: Overview, Quick Reference, Example, Part Tree Example, Material Example, and Part Detail Example. In addition, a help box is displayed for each field within the Compliance Connect™ spreadsheet to provide further clarification.

Process Flow Diagram

The part content reporting process using the Compliance Connect spreadsheet is summarized in the following diagram:



Step 1: Download the Compliance Connect™ Spreadsheet

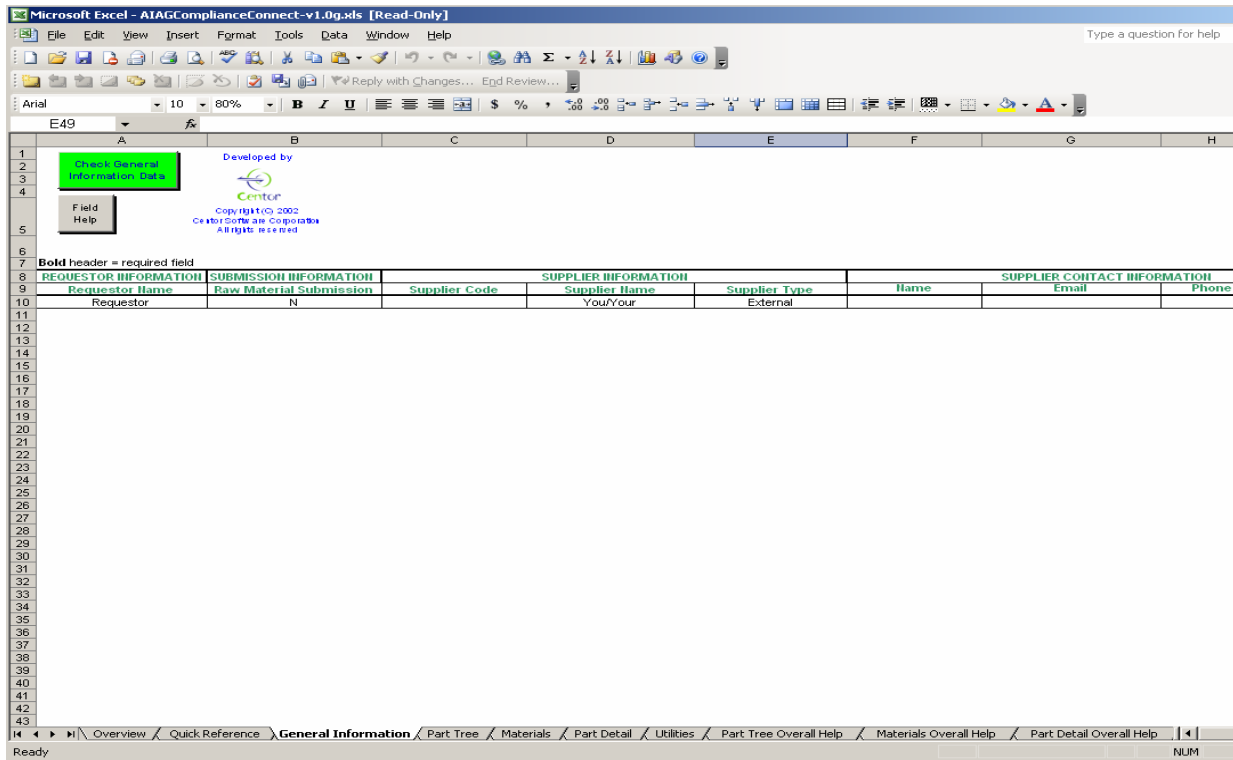
The Compliance Connect™ spreadsheet is available to download from the Motorola [website](#). The spreadsheet is posted as a compressed file (.zip format) due to its large file size.

- Download the .zip file and save it on your computer hard drive or network. Open the downloaded .zip file (use WinZip™ or other compatible software on operating systems prior to Windows XP). Once the .zip file is open, double click on the executable (.exe) file and load Compliance Connect™ on your computer hard drive or network.
- The Compliance Connect spreadsheet should prompt the user to enable or disable macros each time the file is opened. **Macros must be enabled** or required spreadsheet functionality will be lost. If the prompt does not appear, check the Macro Security Level, next.
- To set your Macro Security options:
 - Excel 2003 – select Tools, then Options, then Security tab, then Macro Security button. Select Medium on the Security Level tab and then click the OK button.
 - Excel 2000 – select Tools, then Macro, then Security from the Excel Tool Bar. Select Medium on the Security Level tab and then, click the OK button.
 - To reset your macro security options in Excel 2000 select Tools, then Macro, then Security from the Excel tool bar. Select Medium on the Security Level tab, and then click the OK button. To reset your macro security options in Excel 97 select Tools, then Options, then the General Tab from the Excel tool bar. Remove the check from the box next to “Macro Virus Protection”.

You are now ready to begin reporting.

Step 2: Complete the “General Information” tab

Input general company and contact information for identification purposes. Once the fields are completed, click the "Check General Information Data" button to verify that all required information has been entered and in the proper format. Correct any identified errors, then check supplier information data again before proceeding to Step 3.



The screenshot shows a Microsoft Excel spreadsheet titled "Microsoft Excel - AIAGComplianceConnect-v1.0g.xls [Read-Only]". The spreadsheet is divided into several sections:

- Buttons:** A green button labeled "Check General Information Data" is located in cell A2. A "Field Help" button is in cell A3.
- Logo and Text:** A logo for "Center" is in cell B3, with text "Developed by Center Copyright © 2002 Center for the 3M Corporation All rights reserved" in cells B4 and B5.
- Table:** A table with 8 columns and 1 row of data is shown in rows 8-10.

REQUESTOR INFORMATION	SUBMISSION INFORMATION	SUPPLIER INFORMATION	SUPPLIER CONTACT INFORMATION				
Requestor Name	Raw Material Submission	Supplier Code	Supplier Name	Supplier Type	Name	Email	Phone
Requestor	N		You/Your	External			
- Footer:** A navigation bar at the bottom includes "Overview", "Quick Reference", "General Information" (selected), "Part Tree", "Materials", "Part Detail", "Utilities", "Part Tree Overall Help", "Materials Overall Help", and "Part Detail Overall Help".

Table 3 "General Information" Tab Fields and Definitions		
Column Name	Description	Required/Optional
Requestor	The name of the company requesting you to complete this workbook; the company to whom you sell the parts detailed in this workbook: Motorola	Required
Raw Material Submission	Select "Y" if this submission is for the purpose of specifying raw material composition information only, as opposed to an actual part	Required
Supplier Code	Your supplier code as recognized by Motorola (ePIMS ID)	Required
Supplier Name	Your company name.	Required
Supplier Type	Select "Internal" if you are a Motorola plant, or "External" if you are a Motorola supplier.	Required
Supplier Contact Name	The name of the contact at your company for this data submission.	Required
Supplier Contact Email	The email address of the contact. Enter "N/A" if you have no e-mail address.	Required
Supplier Contact Phone	The phone number of the contact.	Required
Supplier Contact Fax	The fax number of the contact.	Required
Supplier Contact Title	The title of the contact.	Optional
Supplier Contact Department	The department of the contact.	Optional
Supplier Contact Mail code	The mail code of the contact, if applicable.	Optional
Supplier Contact Cell Phone	The cell phone number of the contact.	Optional
Supplier Contact Address 1	The address of the contact.	Optional
Supplier Contact Address 2	The address (line 2) of the contact.	Optional
Supplier Contact City	The city of the contact.	Optional
Supplier Contact State/Province	The state/province of the contact.	Optional
Supplier Contact Zip/Postal Code	The zip/postal code of the contact.	Optional
Supplier Contact Country	The country of the contact.	Optional



Step 3: Complete the “Part Tree” tab

This tab requires suppliers to define the part structure for the saleable part(s) supplied to Motorola, showing the parts at each assembly level within the BOM.

Begin by entering your top-level part (assembly level 01) information in the “Saleable Part” fields. If the part is not an assembly, proceed to Step 4. If the part is an assembly, provide the complete BOM in the Sub-Part fields to the right on the spreadsheet. Assembly information should be staggered on the “Part Tree” tab as shown on the “Part Tree Example” tab. Parts for each descending assembly level should begin one row beneath its parent assembly. Do not input data in grayed cells within the spreadsheet.

If reporting rolled-up data as explained on Page 3, complete the “Saleable Part” fields for each end-item part, check data, then proceed to Step 4.

Click the "Overall Help" button on the “Part Tree” tab for detailed instructions. Use the "Check Part Tree Data" button to verify that all required information has been entered and in the proper format. Correct and check data input until it passes the data check.

The screenshot shows the Microsoft Excel interface for the 'Part Tree' tab. At the top, there are several buttons: 'Check Part Tree Data' (green), 'Overall Help' (gray), 'Field Help' (gray), and a group of four blue buttons: 'Insert Blank Row Before Current Row', 'Insert Blank Row After Current Row', 'Clear Row(s)', and 'Delete Row(s)'. To the right is a red button 'Update Computed Part Weights'. Below these buttons is a note: 'Bold header = required field' and 'Select entire rows when copying AND when pasting.' The main data table has two main sections: 'SALEABLE PART' and 'SUB-PART (L)'. The 'SALEABLE PART' section includes columns for: Requestor Part Number, Requestor Part Revision Level, Requestor Part Revision Date, Part Name, RSRC Recyclability Category, RSRC Disassembly Category, Your Part Number, Your Part Revision Level, Your Part Revision Date, Your Fabrication Plant, Measured Part Weight Amount, Measured Part Weight Unit, Measured Part Weight per Length/Area/Volume Unit, and Computed Part Weight Amount (Informational Only). The 'SUB-PART (L)' section includes columns for: Your Part Number (2), Your Part Revision Level (2), Your Part Revision Date (2), and Your Part Name (2). The spreadsheet is currently showing rows 1 through 28, with row 9 being the first data row. The bottom status bar shows 'Ready' and 'NUM'.

Table 4 “Part Tree” Tab Fields and Definitions “Saleable Part” Fields		
Column Name	Description	Required/Optional
Requestor Part Number	The Motorola part number.	Required
Requestor Part Revision Level	This column designates the revision level or revision number of the part. Enter the revision indicator that Motorola uses. Enter “N/A” if Motorola does not use Revision Level to track parts.	Required
Requestor Part Revision Date	This is the effective date of the part revision for Motorola (e.g. drawing, ECN). The date format is dd-mmm-yyyy (e.g. 06-Jan-2007). Enter “N/A” if Motorola does not use Revision Date to track parts.	Required
Part Name	This is the descriptive name for the part	Required
RSRC Recyclability Category	Select “N/A” from the drop down list. RSRC data is not required at this time.	Required
RSRC Disassembly Category	Select “N/A” from the drop down list. RSRC data is not required at this time.	Required
Your Part Number	Your unique part number.	Required
Your Part Revision Level	Your revision level for the part. Enter “N/A” if you do not use Revision Levels to track parts.	Required
Your Part Revision Date	The effective date of your revision level for the part with format dd-mmm-yyyy. Enter “N/A” if you do not use Revision Dates to track parts.	Required
Your Fabrication Plant	Enter a comma-separated list of the names of your plants where this part is fabricated. You must enclose each plant in quotes (e.g. “plant 1”, “plant 2”).	Optional
Measured Part Weight Amount	The measured weight of the saleable part, as reported in PPAP documentation. This is the finished net weight (without packaging).	Required
Measured Part Weight Unit	Select which unit of measure is to be applied to the measured weight in the previous column (g, kg, or lb).	Required

Table 4 “Part Tree” Tab Fields and Definitions “Saleable Part” Fields, continued		
Column Name	Description	Required/Optional
Measured Part Weight per length/area/volume Unit	If this is a saleable discrete part, then set this to “each”. If this is a saleable bulk item, such as paint, adhesives, or lubricants, where the Measured Part Weight Amount is a function of length, area, or volume, and then set this appropriately per length, area, or volume unit.	Required
Computed Part Weight Amount <i>(Informational Only)</i>	Computed based on the sum of the weights of the saleable part’s components. Compare to the Measured Part Weight Amount value for accuracy. NOTE: value is computed in kg when Measured Part Weight Amount, Measured Part Weight Unit, Measured Part Weight per Length/Area/Volume Unit information is not provided.	-Derived-

Table 4 “Part Tree” Tab Sub-Part (level 2 through level 30) Fields, continued (Not required for rolled-up BOM)		
Column Name	Description	Required/Optional
Your Part Number (<i>n</i>) (where <i>n</i> = sub-part level, 2 or greater)	Your unique part number for the sub-part.	Required
Your Part Revision Level (<i>n</i>) (where <i>n</i> = sub-part level, 2 or greater)	Your revision level for the sub-part. Enter “N/A” if you do not use separate Revision Levels to track parts.	Required
Your Part Revision Date (<i>n</i>) (where <i>n</i> = sub-part level, 2 or greater)	The effective date of your revision level for the sub-part. The date format is dd-mmm-yyy (e.g., 06-Jan-2007). Enter “N/A” if you do not use Revision Dates to track parts.	Required
Your Part Name (<i>n</i>) (where <i>n</i> = sub-part level, 2 or greater)	Your descriptive name for the sub-part.	Required
RSRC Recyclability Category (<i>n</i>) (where <i>n</i> = sub-part level, 2 or greater)	Select “N/A” from the drop down list. RSRC data is not required at this time.	Required

Table 4 “Part Tree” tab Sub-Part (level 2 through level 30) Fields, continued (Not required for rolled-up BOM)		
Column Name	Description	Required/Optional
RSRC Disassembly Category (<i>n</i>) (where <i>n</i> = sub-part level, 2 or greater)	Select “N/A” from the drop down list. RSRC data is not required at this time.	Required
Part Quantity Amount (<i>n</i>) (where <i>n</i> = sub-part level, 2 or greater)	The amount of the sub-part used in the saleable part. For discrete parts, enter the integer number of sub-parts used. For bulk items, such as paint or wire, this will likely not be an integer.	Required
Part Quantity Unit (<i>n</i>) (where <i>n</i> = sub-part level, 2 or greater)	The unit of the sub-part quantity. For discrete parts, enter “each”. For bulk items such as paint or wire, enter one of the other values.	Required

Step 4: Complete the “Materials” tab

The “Materials” tab requires suppliers to create and define material records of fabrication used in each bottom level part as defined on the “Part Tree” tab, or for each saleable part if reporting data in a rolled-up format.

Material records identified or created during Step 4 will be matched up with the corresponding bottom level part during Step 5 – “Part Detail” tab.

To create a new material type, enter the attributes described in Table 5 for each material, including the name and concentration of substances present.

Substances are selected from an extensive list. Enter each substance contained within the material on a separate line beneath the grayed-out cells for that material. Use “Misc.” to report proprietary information or in place of specific substances which may not be included in the available list. The specific substance must be reported in all cases when it is classified as “Banned”, “Controlled” or “Reportable” and exceed the reporting thresholds as published in the W18 specification. When reporting “Misc.” as greater than 10% of the material content, include a comment in the “Remarks” field that the actual substance is either proprietary or that it is not available in the pull-down menu. If the later, include the CAS# for the substance missing from the list in your comment. Failure to follow this requirement will result in your submittal being considered incomplete and thereby rejected. The sum of the substance concentrations reported for each material must equal 100% or 1 million parts per million.

Table 5 “Materials” Tab Fields and Definitions		
Column Name	Description	Required/Optional
Material Name	The common industry name for the material. Consult applicable standards for naming guidelines (e.g., ISO 1043-1 for plastics).	Required
Trade Name	The material trade name usually based on who supplied the material. Also known as commercial name. If you have multiple materials with the same Material Name + Manufacturer, use this field to differentiate them.	Optional (Required if Raw Material Submission)
Material Manufacturer Name	The name of the manufacturer of the material. Select the manufacturer’s name from the supplied list or enter it manually if not in the list. If you have multiple materials with the same Material Name + Trade name, use this field to differentiate them.	Optional (Required if Raw Material Submission)
RSRC Material Designation	Select “N/A” from the drop down list. RSRC data is not required at this time.	Required
IMDS Material Symbol	This is the IMDS material symbol. Consult applicable standards for naming guidelines (e.g., ISO 1043-1 for plastics).	Optional
Material Classification	Select the applicable material classification from the drop down list. See Table 6 for available options.	Required
Applicable OEM or Requestor Specifications	Enter “N/A: not required by Motorola”	Required
Applicable Industry Specifications	Enter “N/A: not required by Motorola”	Required
Pre-Consumer Recyclate %	Report the % of the material weight that originated from scrap from some manufacturing process. Do not include regrind. An example of pre-consumer recyclate is metal shavings generated during manufacturing that are then melted and used to produce other parts.	Required

Table 5 “Materials” Tab Fields and Definitions, continued		
Column Name	Description	Required/Optional
Post-Consumer Recyclate %	Report the % of Post-Consumer Recyclate contained in the material. Post-consumer recycled material come from products that have served their intended uses by consumers and have been diverted from the waste stream (e.g. plastic soda bottles that have been recycled, then used to produce plastic clips).	Required
Contained Recyclate % As Released	The sum of the Pre-Consumer Recyclate percentage of the material and Post-Consumer Recyclate percentage of the material.	-Derived-
Contained Recyclate % As Measured	The percent of recyclate contained in the material as measured. Typically the same as the Contained Recyclate % As Released.	Required
Specific Gravity	Density entered as specific gravity of the material. Enter “N/A”; not required by Motorola.	Required
Remarks	General comments regarding this material information submission.	Optional
Substance Name	The chemical substance name from the list of valid substances.	Required
CAS Number	The Chemical Abstracts Service number for the chemical substance name in the previous column.	Required
Substance Concentration Amount	Amount of the reported substance in the affected part/material, typically in percent by weight of the material containing the substance.	Required
Substance Concentration Unit	The units used to report the concentration in the previous column, typically “%”.	Required

Table 6 lists the available Material Classifications for use when creating a new material type on the “Materials” tab.

Table 6 Material Classifications	
1.1	Steels/cast steel/sintered steel
1.1.1	Steels - unalloyed or low alloyed
1.1.2	Steels - highly alloyed
1.2	Cast iron
1.2.1	Cast iron with lamellar graphite / tempered cast iron
1.2.2	Cast iron with nodular graphite / vermicular cast iron
1.2.3	Highly alloyed cast iron
2.1	Aluminum and aluminum alloys
2.1.1	Cast aluminum alloys
2.1.2	Wrought aluminum alloys
2.2	Magnesium and magnesium alloys
2.2.1	Cast magnesium alloys
2.2.2	Wrought magnesium alloys
2.3	Titanium and titanium alloys
3.1	Copper (e.g. copper amounts in cable harnesses)
3.2	Copper alloys
3.3	Zinc alloys
3.4	Nickel alloys
3.5	Lead
4.1	Platinum / rhodium
4.2	Others
5.1	Thermoplastics
5.1.a	Filled Thermoplastics
5.1.b	Unfilled Thermoplastics
5.2	Thermoplastic elastomers
5.3	Elastomers / elastomeric compounds
5.4	Duromers
5.4.1	Polyurethane
5.4.2	Unsaturated polyester
5.4.3	Others
5.5.1	Plastics
5.5.2	Textiles
6.1	Lacquers
6.2	Adhesives, sealants
6.3	Underseal
7.1	Modified organic natural materials (e.g. leather, wood, cardboard, c...)
7.2	Ceramics / glass
7.3	Other compounds (e.g. friction linings)
8.1	Electronics (e.g. pc boards, displays)
8.2	Electrics
9.1	Fuels
9.2	Lubricants
9.3	Brake fluid
9.4	Coolant / other glycols
9.5	Refrigerant
9.6	Washing water, battery acids
9.7	Preservative
9.8	Other fuels and auxiliary means

Step 5: Complete the “Part Detail” tab

The “Part Detail” tab requires suppliers to correlate the material type with each bottom level part, or saleable part if reporting rolled-up data. The Compliance Connect™ spreadsheet identifies bottom level parts based on the BOM structure input on the “Part Tree” tab during Step 3, and identifies them in a pop-up box when the “Part Number” field is selected.

Begin by clicking on the first cell under “Part Number” and selecting a bottom level part from the list. Enter the part attributes (columns headings have red text) on the first line. On subsequent lines, enter information regarding the material(s) comprising that part (green headings). For each material in a part, click the cell under “Material Name” and select a material from the list. The “Material Name” list is generated by material record entries created on the Material tab during Step 4.

Click the "Overall Help" button on the “Part Tree” tab for detailed instructions. Use the "Check Part Detail Data" button to verify that all required information has been entered and is in the proper format. After the data has been verified in the “Part Detail” tab, the “Certify and Export” button will become enabled.

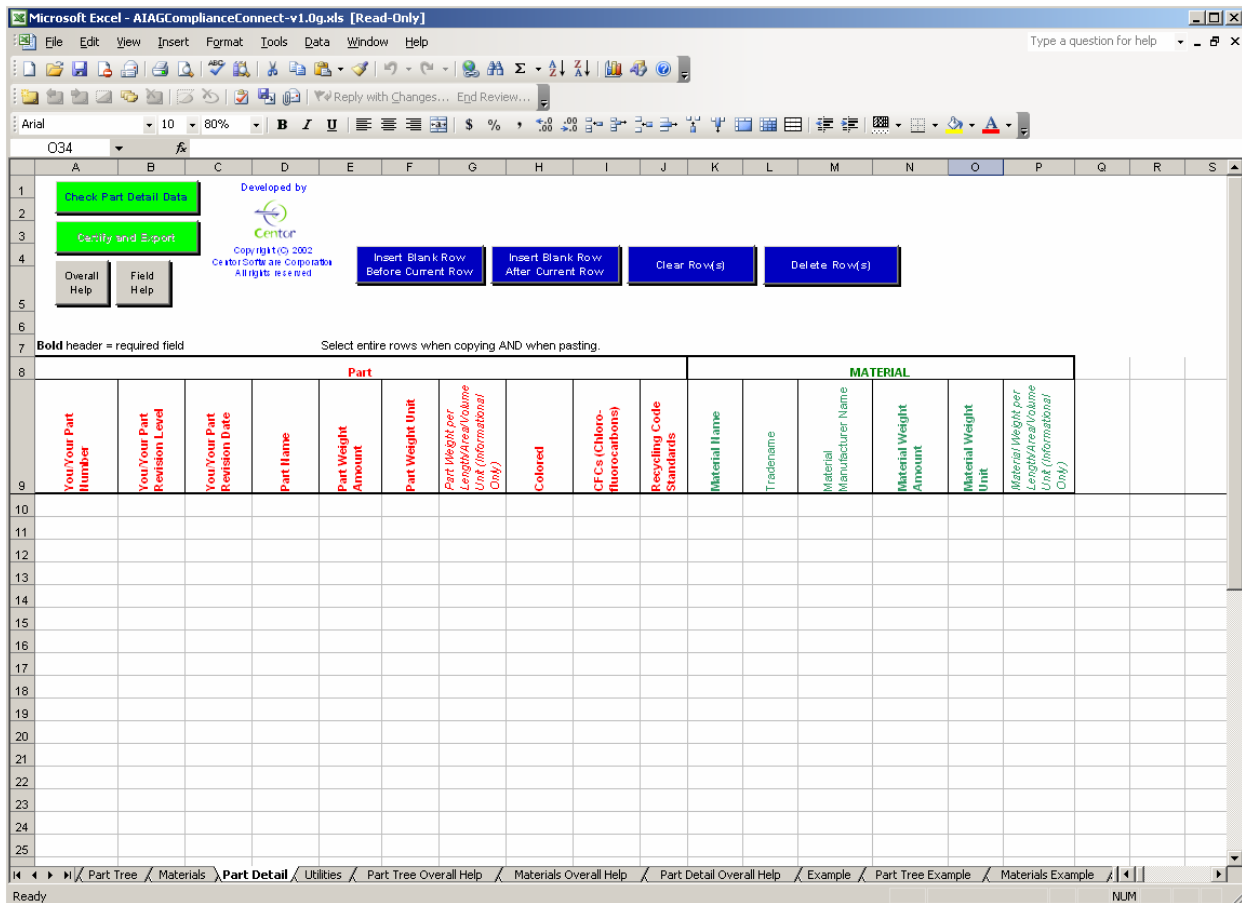


Table 7 “Part Detail” Tab Fields and Definitions		
Column Name	Description	Required/Optional
Your Part Number	Your unique part number (auto-populated).	-Derived-
Your Part Revision Level	Your revision level for the part (auto-populated).	-Derived-
Your Part Revision Date	The effective date of your revision level for the part (auto-populated).	-Derived-
Part Name	The descriptive name for the part (auto-populated).	-Derived-
Part Weight Amount	The measured weight of the part.	Required
Part Weight Unit	Select which unit of measure is to be applied to the measured weight in the previous column.	Required
Part Weight per Length/Area/Volume Unit	This column is a reminder of the Part Quantity Unit/Part Weight Unit attribute for this leaf-level part in the Part Tree tab. If this is a saleable discrete part, then it will be “each”. If this is a saleable bulk item, such as paint, adhesives, or lubricants, where the “Part Weight Amount” is a function of length, area, or volume, then it will be the per length, area, or volume unit. If the actual Part Weight was specified on the Part Tree tab, then it will be “weight”.	-Derived-
Colored	Select “Y” for colored parts, “N” for parts with no added pigments, dyes, or colors.	Required
CFCs	Select “Y” if Chlorofluorocarbons are used in the manufacturing of this part; otherwise, select “N”.	Required
Recycling Code Standards	Select all recycling code standards that apply to this part from the list provided: SAE J1344, ISO 1043-1, ISO 1043-2, ISO 1629, ISO 11469, VDS 260, Chemical Symbol. Select “Not Applicable” if one or more of the following apply: part is not recyclable, too small, weighs less than 50g, not feasible to mark, exempt from marking. Select “Not Marked” if the part is not marked according to any of the above standards.	Required
Material Name	The common industry name for each material comprising the part. The part may consist of several materials. Create one row for each material. (Select from available materials previously entered in the “Materials” tab.)	Required

Table 7 “Part Detail” Tab Fields and Definitions, continued		
Column Name	Description	Required/Optional
Trade Name	The material trade name, usually based on who supplies the material. Also known as “commercial name”. (Auto-populated)	-Derived-
Material Manufacturer Name	The name of the material manufacturer. (Auto-populated)	-Derived-
Material Weight Amount	Weight of the material in comprising the part; for bulk materials, e.g., sealers and adhesives, estimate the average mass of the material applied per part. Select from pull-down menu.	Required
Material Weight Unit	The weight units used to specify the material weight in the previous column. Select from pull-down menu.	Required
Material Weight per Length/Area/Volume Unit (Informational Only)	This column is a reminder of the “weight per” attribute for the material. It is the same as the Part Weight per Length/Area/Volume Unit for the part when Material Weight Unit is not “%”.	-Derived-

Step 6: Certify and Export

Click the "Certify and Export" button on the “Part Detail” tab to 1) perform final validation checks, 2) certify the contents of the spreadsheet and, 3) export the report file into a .cxs format and save it on your computer hard drive or network. If data validation errors occur, make any necessary corrections, click on the “Check Part Detail Data” button, then click the “Certify and Export” button again. The .cxs file is read-only and cannot be edited.

Step 7: Submit Data to Motorola

E-mail the .cxs file generated during Step 6 to w18submittal@motorola.com unless otherwise instructed by Motorola.

DO NOT E-MAIL THE SOURCE .XLS FILE.

Do not modify the .CXS file name.

Your Motorola Compliance Connect reporting requirement is now complete.

Glossary

12G02897W18 – Motorola Global Common Specification for Controlled and Reportable Materials Disclosure. The intent of the specification is to reduce substances of concern in Motorola products in order to produce more environmentally friendly products as well as improve the recovery and recyclability without negative environmental impact.

Assembly Level – Assembly levels are used to identify the location of detail components within the parts structure in a bill of materials. Saleable parts are assembly level 1. The components (including subassemblies) comprising the saleable part are assembly level 2, and so forth.

Bill of material (BOM) – A bill of material is an engineering part list that indicates the subcomponents (and sometimes materials) used in an assembly. A bill of material will typically include the assembly level for each part, indicating how the part is assembled, as well as the part quantity for each subcomponent.

Bottom level part – A part that is not an assembly, that is, a single piece item that is not comprised of multiple parts. Bottom level parts are also referred to as lowest-level or leaf-level parts.

Chlorofluorocarbons (CFCs) – Chemicals sometimes used as propellants in aerosol cans or as refrigerants.

Chemical Abstracts Service (CAS) Numbers – CAS numbers are a unique identifier assigned to substances to eliminate the confusion and ambiguity of having more than one scientific or common name for a substance. A known unique organic and inorganic substances have CAS Numbers.

Component – The parts that comprise an assembly. Components may be single piece parts, or they may be sub-assemblies.

IMDS – The International Material Data System – An automotive industry part content data collection system used by many OEMs.

Macros – An action or set of actions you can use to automate tasks.

Pre-Consumer Recyclate – The portion of a material's weight that has been recovered from or otherwise diverted from the industrial waste stream for the purpose of recycling. Pre-consumer recyclate does not include home scrap. Pre-consumer recyclate is also referred to as rework, post-industrial materials, and post-process materials. Pre-consumer recyclate is material recovered from the waste stream of a manufacturing process for use in a different manufacturing process or has been recycled/recovered by a third party and returned to the manufacturing process.

Post-Consumer Recyclate – The portion of a material's weight that comes from products or materials that have served their intended end uses and have been recovered from or otherwise diverted from the consumer waste stream for the purpose of recycling. An example is recycled beverage containers that are sources of material for auto parts.

RSRC – The Regulated Substance and Recyclability Certification System – An Internet accessible program developed and used by DaimlerChrysler Corporation for collection of supplier part, material, and substance of concern data.

Saleable part – The final, as shipped part supplied to Motorola.

Specific Gravity – The ratio of the density of a material (g/cm^3) to the density of water (1.0 g/mL).

Frequently Asked Questions

Reporting Requirements

Q1: [Who do I contact for technical support?](#)

A1: Refer to the Motorola Materials Disclosure Process [website](#).

Q2: [Do I need to include packaging materials in my report?](#)

A2: Do not include the packaging materials used for transporting your parts to Motorola or its designated manufacturing location. Motorola does require materials disclosure for all packaging sourced for use in transporting Motorola products to its customers.

Q3: [Is it possible to copy parts from one location to another?](#)

A3: Yes. Data contained in part or material records can be copied within the same spreadsheet, or to another spreadsheet. Select entire rows when copying and pasting.

Q4: [What if I no longer supply the requested part to Motorola?](#)

A4: Notify the help desk via e-mail and be sure to include all part numbers in question and their circumstances.

Q5: [Where do I find the information required by the Compliance Connect™ spreadsheet?](#)

A5: Part structure, quantity, and other information are generally available on a bill of material. Much of the required material and substance content information can be gathered from your suppliers. Material Safety Data Sheets (MSDS) may be a source for some information, however, be careful to include only the constituents of the material as supplied to Motorola (e.g., an MSDS for paint will include solvent which will evaporate from the paint during the drying/curing process).

Q6: [How do I report a substance that is not in the look-up table in Compliance Connect™?](#)

A6: If a specific substance present in your part is not listed in the look-up table, it may be reported as “Misc.” as long as that substance is not a Motorola “Banned”, “Controlled”, or “Reportable” substance. Indicate the CAS Number for this substance in the “Remarks” column as instructed in Step 4

Q7: [How do I report proprietary material information?](#)

A7: If the identity of a specific substance present in your part is considered proprietary it may be reported as “Misc.” as long as that substance is not a Motorola “Banned”, “Controlled”, or “Reportable” substance. Indicate that this substance is considered proprietary by your company in the “Remarks” column as instructed in Step 4.

Error Messages

Q8: [Why aren't all of the bottom level parts in my Part Tree showing up on the Part Detail tab?](#)

A8: Be certain the component structure is defined properly on the Part Tree tab. Only bottom level parts (those without subcomponents) will appear on the Part Detail tab. In addition, if a bottom level part is used in multiple assemblies, it must only be reported on the Part Detail tab once.

Q9: [What do I do when I get an error that says that my weights do not add up to 100%?](#)

A9: The sum of the weight of materials reported for each part must equal the part weight provided in the “Part Weight Amount” column, or 100%. In addition, the sum of substance weights must equal 100% or be equal to the material weight.

Q10: I cannot generate a .cxs file. What is wrong?

A10: There are a series of data checks that must be completed before the Compliance Connect spreadsheet will generate a .cxs file. Users of the spreadsheet must utilize the Check Data button on each tab to ensure the data is correct before proceeding to the next tab.

Compliance Connect Spreadsheet

Q11: What is the difference between the bold headings and the non-bold headings in the Compliance Connect™ spreadsheet?

A11: The bold headings are columns that require data input in order to pass the data validation checks. Many of the required columns will allow input of “N/A” if the required data does not apply to the product you supply Motorola. Input of data in the non-bold headings is not required to pass the data validation checks or by Motorola.

Q12: Why are there grayed out rows on the Part Tree and Part Detail tabs?

A12: Information input into Part Tree and Part Detail tabs is to be staggered. Data for subparts should begin one row below its parent assembly. Likewise, substance information begins one row below the material it comprises. The gray fields indicate cells that should remain blank in order to maintain proper data structure.