ZEBRA TECHNOLOGIES SIMPLIFIED COMPLIANCE FORM (SCF)

GUIDE TO COMPLETING A FULL MATERIAL DISCLOSURE (FMD) MATERIAL DECLARATION REQUEST

ZEBRA

JA-10000-050

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1 - Introduction

Zebra Technologies is committed to ensuring its products are fully compliant with all mandatory global environmental compliance regulations. As a result, all suppliers are required to provide a full material disclosure at the homogeneous part level for all products as specified in the CPZ-CE-010 Environmental Compliance Specification which can be found on our corporate website:

http://www.zebra.com/compliance-SCF

In order to comply with these requirements, your company has received a pre-populated Simplified Compliance Form (SCF) from Zebra Technologies. You are required to complete the SCF by the specified date and return it back to the Zebra representative who sent it to you. The Zebra representative who sent you the form will be your central point of contact for all questions and concerns regarding completing the SCF.

This file contains the MD#, declaration type, supplier part #, company name, and company ID. This information is NOT editable and, if there is any discrepancy with it, the Zebra representative must be informed and they will research why there is a discrepancy.

Please follow the instructions in this guide to ensure correct and timely completion of the SCF. Additional training resources and troubleshooting information can also be found on the Zebra corporate website at the link below:

http://www.zebra.com/compliance-SCF

2 – Definitions

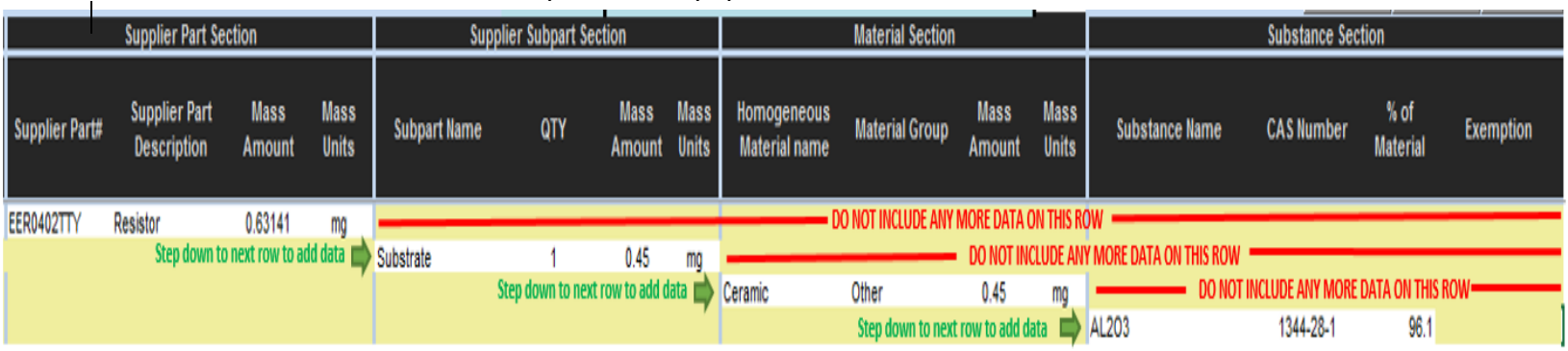
CAS Number	CAS (Chemical Abstract Service) Registry Number is a unique number used to identify specific chemical substances.
Controlled Substance	These substances are limited for use in the manufacturing process or in certain applications at the levels specified in Appendix A in CPZ-CE-010.
FMD	Full Material Disclosure
Homogeneous Material	A substance or a mixture of substances with uniform composition (such as paints, alloys, solders, adhesives, plating, resins, coatings, etc.) that comprises a product. Material that cannot be mechanically disjointed into different materials respectively. The term “homogeneous” means of “uniform composition throughout.” However, additives used in a polymerization process must be reported if they are identified in Appendix A of CPZ-CE-010.
PMD	Partial Material Disclosure
PPM	Parts per Million (Measure of Concentration)
REACH	European Community Regulation on chemicals and their safe use (EC 1907/2006). It deals with Registration, Evaluation, Authorization and Restriction of Chemical substances.
Reportable Substances	These substances are not currently banned or controlled for use but a ban or voluntary phase-out is likely or they have an impact on the end-of-life management of the finished product.

Reporting Threshold	Concentration level which defines the limit equal to or above which the presence of a substance or material must be reported.
RoHS	European directive on Restriction of the use of certain Hazardous Substances in electrical and electronic equipment
SVHC	Substances of Very High Concern as defined in the REACH regulation

3 - Completing a Full Material Disclosure Declaration

To populate the form with substance data, there are essentially have 2 options. First, the data can be imported from an existing XML or MCC file. If these files are not available, the data can be manually entered to complete the SCF either by copying/pasting data from an external source or by manually completing each line.

IMPORTANT NOTE: Data must be entered in the "step down" method beginning at Cell E11. See screenshot below for a visual representation of this method. It is important to also note that all fields shown below are required to be populated.



4 - Opening the Form

1. It is best practice to avoid opening the form directly from the e-mail it has been attached to. Be sure to save the file to the desktop or another location on a PC or on a removable storage media before beginning to complete a declaration.
    a. **IMPORTANT NOTE**: For users running MS Office 2010 or newer, avoid opening another Excel file directly from an e-mail attachment while the SCF is open as it may cause issues with sheet protection in the non-SCF file (e.g. loss of Toolbar accessibility).
2. Once saved to the desired location, double click the file icon to open the pre-populated SCF file.
    a. Please note that the form must be set to U.S. English language settings. The About tab outlines how to do this if the Excel software is set to another language.
3. When the form launches, macros must be enabled as shown below in order for the form to function. If enabling macros is not possible, please contact the Zebra representative immediately.

ZEBRA

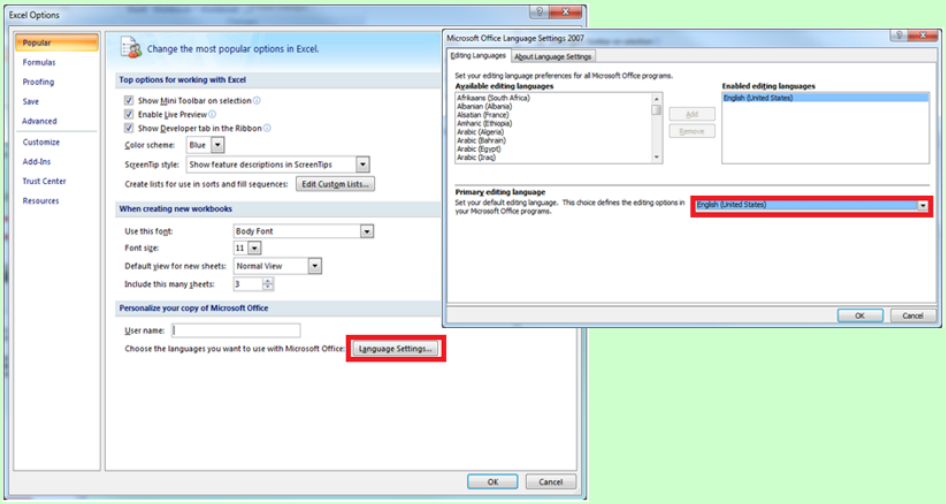
Simplified Compliance Form

TMP-12508-90 Rev B

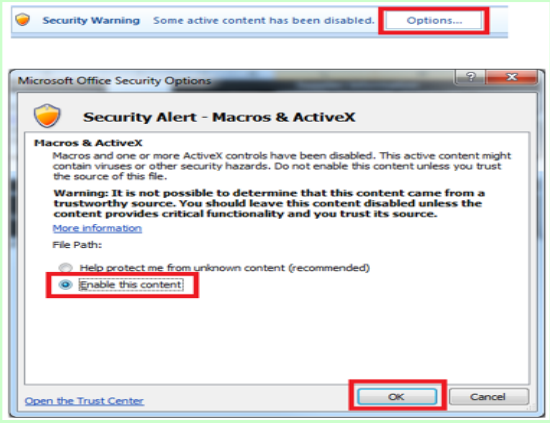
Introduction:
The Simplified Compliance Form is a spreadsheet based tool for creating an IPC 1752A Homogeneous Material Declaration (Class D) in XML format. It's basic functions are to load an Zebra XML request header, enter and edit material content information and generate an output XML file suitable for submission to Zebra.

System requirements:
Microsoft Excel v2003 Professional, SP3 or later
Macros must be enabled in order for the automated functions to operate. Check Excel security setting to confirm.

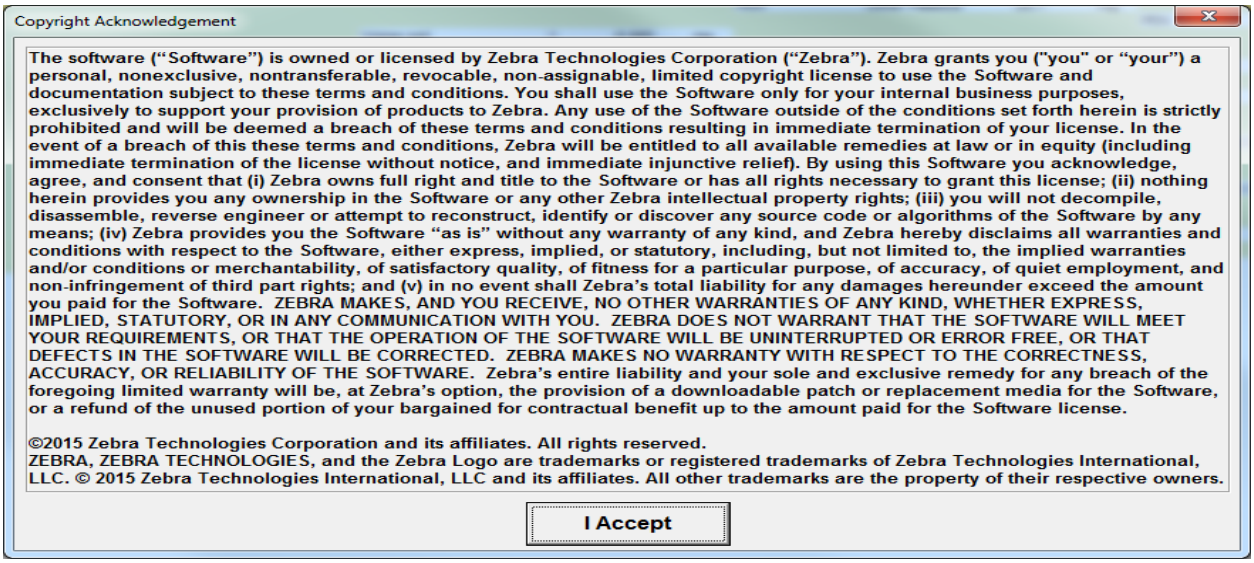
1. Please ensure to set Primary Editing Language to English (United States)



2. Please ensure to enable the Macro

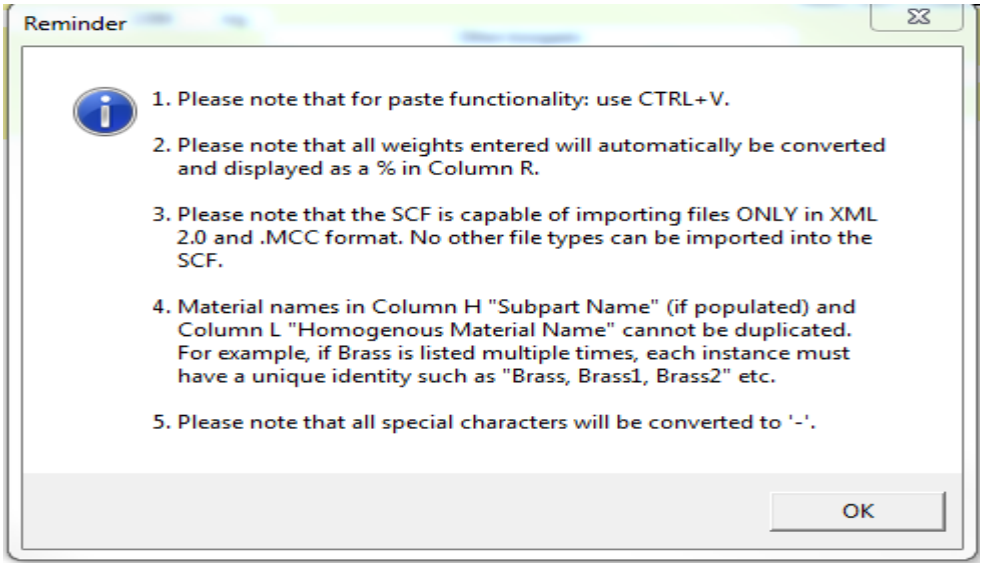


4. After enabling macros, the Copyright Acknowledgement must be accepted by clicking "I Accept". **IMPORTANT NOTE:** clicking on the X in the upper right hand corner of the copyright acknowledgement will cause the form will become unusable and must be reopened in order to function properly.



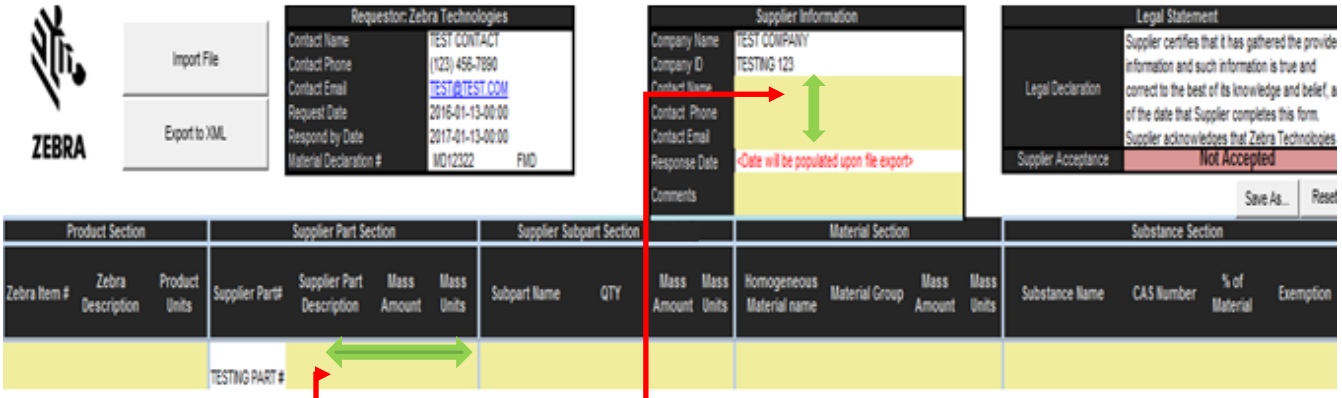
5. Once accepted, the form will then display other important information. Please be sure to take note of these informational reminders shown below in the REMINDER box. Click OK on this box as well. Once clicked, the form will begin to load.

IMPORTANT NOTE: This REMINDER box contains critical information. Please read and understand before continuing.



5 - SCF Header

Below is a snapshot of what the SCF looks like once it is open. The supplier part description, mass amount, and mass units must be completed in order to proceed. The Supplier Information with the yellow background must also be populated in order to successfully export the XML declaration. **IMPORTANT NOTE:** Row 11 is locked from columns H-S to help eliminate incorrectly placing data in those cells.



- Must complete
- Must fill in supplier information

6 - Overview of the SCF's Buttons – What They Mean and What They Do:

These buttons are all displayed at some point during the declaration completion process. Below is an overview of what each button does and when it appears.

Restores an SCF to an earlier point in time. Appears after 10 minutes of a form being open, after a file import, or after a reset is performed

Appears after an error check is performed. Lists all errors which must be resolved before generating a declaration

Allows form to be saved as a different file name

Resets an SCF and clears all data except for the pre-populated data entered into the form

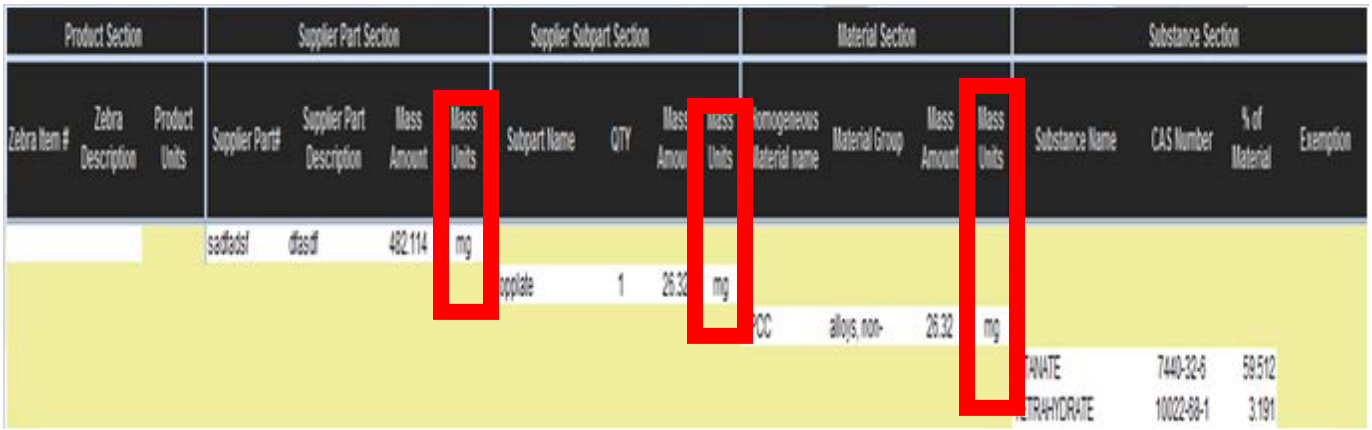
Imports an XML or MCC file or header

Begins the error checking process to generate an XML declaration file

7 - Manual Completion of the SCF

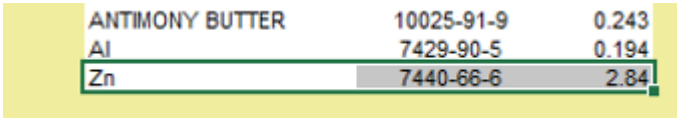
1. Begin filling in the information in cell H12 for Subpart info. If this information is not available or does not apply, begin filling in the Homogeneous Material data in cell L12.
2. **IMPORTANT NOTE:** Row 11 is locked from Columns H-S as the data must flow by using the "step down" approach from column group to column group as previously mentioned on page 2 of this guide. See below for an example. If this format is not followed, an error will occur during export. This will need to be corrected before an XML declaration can be exported.

   a. Note that Mass Units need to be selected from a drop down box in Grams (g), Milligrams (mg), or Kilograms (kg).
   b. When, pasting data into the form (as indicated in the Reminder Box, bullet #1), CTRL+V must be used. Right clicking is disabled on this form along with the menu toolbars.
   c. Note that material names in Column H "Subpart Name" and Column L "Homogeneous Material Name" cannot be duplicated. For example, if Brass is listed multiple times, each instance must have a unique identity such as "Brass, Brass1, Brass2, etc."
   d. It is recommended to enter "Others" into the "Material Group" section.



3. Select the substances and CAS numbers for the homogeneous material.
   a. Click in the column for Substance Name or CAS number to bring up the CAS # search box.
   b. Once the search box appears, type in the substance name or CAS # or paste the CAS #using CTRL+V.

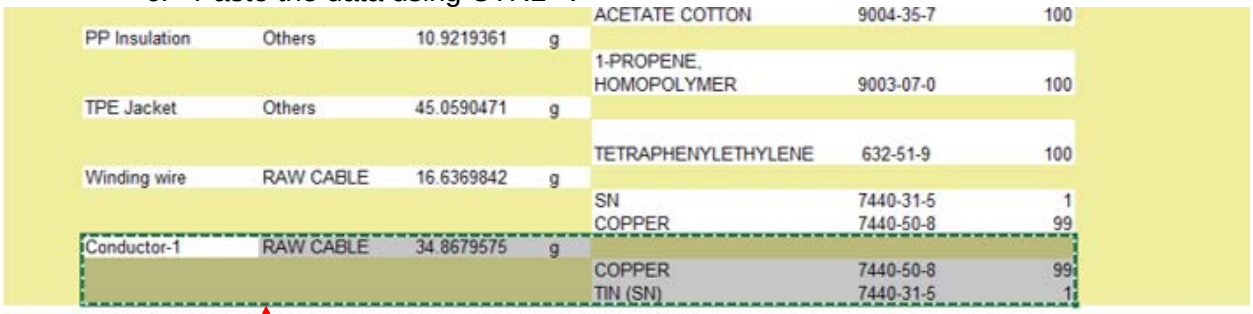
c. Click “Search” or strike the “ENTER” key.
d. Once the substance has been located, double click on it to select it.
e. **IMPORTANT NOTE**: when pasting substance data into the substance and CAS # cells, all cells must be selected in which you will be pasting into. For example, if you’ve copied a CAS # and substance name, you must select cells in both columns, Q & R. If you’ve copied the % of material as well, you must then select cells in columns Q, R, & S.



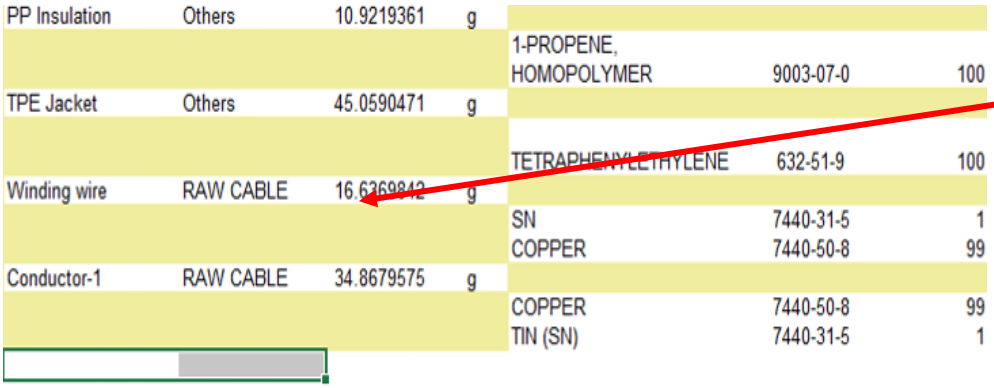
8 - Copying/Pasting Data in the SCF

As mentioned throughout this document, the SCF is capable of copying and pasting data from within the SCF and from outside documents including other SCF files. There are 2 different scenarios for copy/paste that require the following steps to be followed:

1. If the source being copied contains a range of only 1 cell
    a. Copy the source data using CTRL+C
    b. Select the specific cell where the data will be pasted
    c. Paste the data using CTRL+V
2. If the source being copied contains a range of more than 1 cell
    a. Copy the source data using CTRL+C
    b. Select 2 adjacent cells in the top left portion of the area where the data will be pasted
    c. Paste the data using CTRL+V



Step 2a – Text selected using CTRL+C

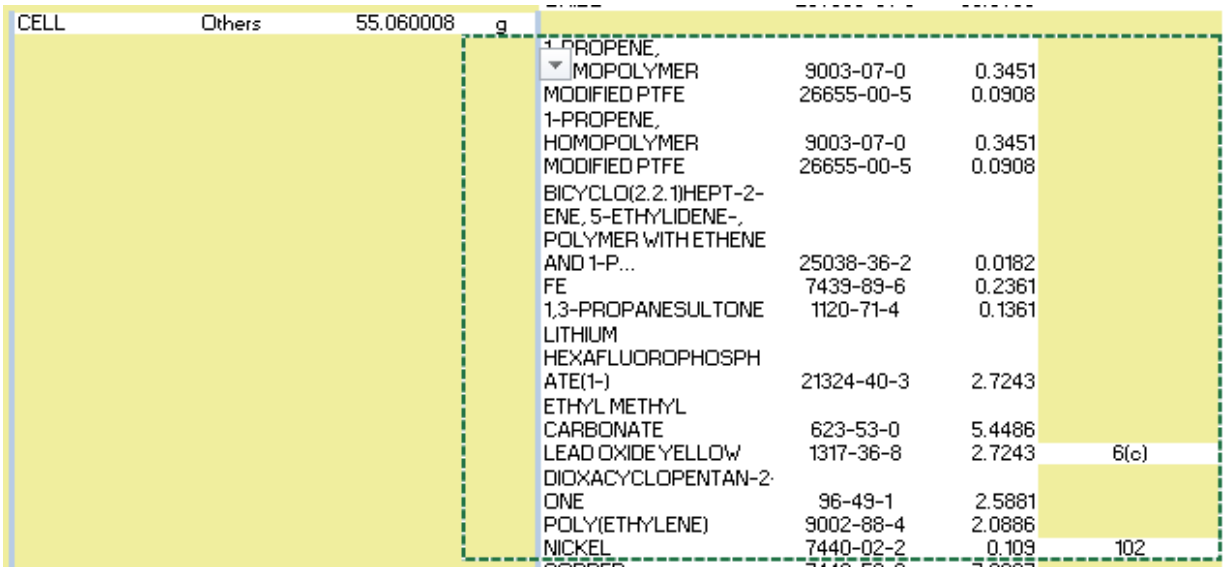


Step 2b – 2 adjacent cells in the top left portion of the area where the data will be pasted

PP Insulation	Others	10.9219361	g			
				1-PROPENE, HOMOPOLYMER	9003-07-0	100
TPE Jacket	Others	45.0590471	g			
				TETRAPHENYLETHYLENE	632-51-9	100
Winding wire	RAW CABLE	16.6369842	g			
				SN	7440-31-5	1
				COPPER	7440-50-8	99
Conductor-1	RAW CABLE	34.8679575	g			
				COPPER	7440-50-8	99
				TIN (SN)	7440-31-5	1
Conductor-1	RAW CABLE	34.8679575	g			
				COPPER	7440-50-8	99
				TIN (SN)	7440-31-5	1

Step 2c – Data pasted using CTRL+V

NOTE: To copy a large section of Substance Name data (columns P through S), please click on the blank cell to the left of the topmost section of the data (column O) and highlight to column S.

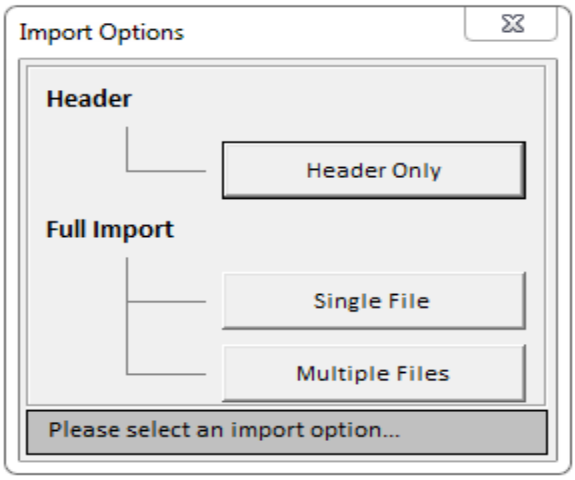


CELL	Others	55.060008	g				
				1-PROPENE, HOMOPOLYMER	9003-07-0	0.3451	
				MODIFIED PTFE	26655-00-5	0.0908	
				1-PROPENE, HOMOPOLYMER	9003-07-0	0.3451	
				MODIFIED PTFE	26655-00-5	0.0908	
				BICYCLO(2.2.1)HEPT-2-ENE, 5-ETHYLIDENE-, POLYMER WITH ETHENE AND 1-P...	25038-36-2	0.0182	
				FE	7439-89-6	0.2361	
				1,3-PROPANESULTONE	1120-71-4	0.1361	
				LITHIUM HEXAFLUOROPHOSPHATE(1-)	21324-40-3	2.7243	
				ETHYL METHYL CARBONATE	623-53-0	5.4486	
				LEAD OXIDE YELLOW	1317-36-8	2.7243	6(c)
				DIOXACYCLOPENTAN-2-ONE	96-49-1	2.5881	
				POLY(ETHYLENE)	9002-88-4	2.0886	
				NICKEL	7440-02-2	0.109	102

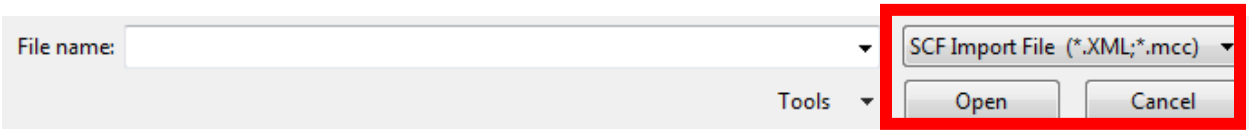
Move the cursor to where the copied data is needed then click CTRL + V to paste.

9 - Completing the Form by Importing Data

1. Click on the “Import File” button located in the upper left portion of the spreadsheet.
2. A dialog box will appear with different options.

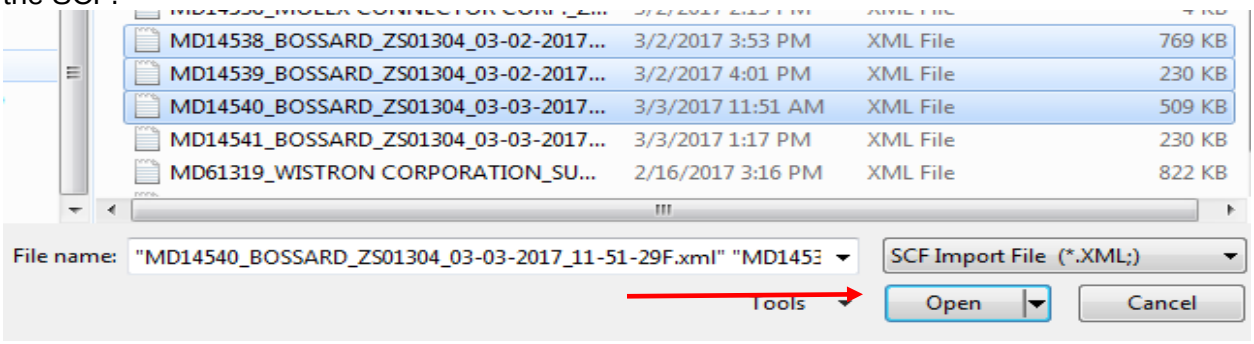


3. Importing a Header Only will only populate the header section of the SCF so here, “Full Import” will be used.
4. The SCF supports IPC1752A XML files (version 2.0 **only**) or .MCC files for import. The accepted SCF file types are also listed in the window below:



5. As the file imports, the status box is displayed

6. Once the file imports the data, the form will be completely populated with product information.
7. The SCF also allows the import of multiple XML files of the same format. **IMPORTANT NOTE:** <u>The files must all be XML 2.0 and formatted the same for multiple file import to work. If an error is generated upon import, the cause is likely due to the file formats not being identical</u>.
8. If importing multiple files, the files must all be selected at the same time before importing. This is accomplished by holding down the CTRL key while selecting each file. Once the files have been selected, click on the Open button and the files will import into the SCF.



9. **IMPORTANT NOTE:** Material names in Column H “Subpart Name” (if populated) and Column L “Homogeneous Material Name” cannot be duplicated. For example, if Brass is listed multiple times, each instance must have a unique identity such as “Brass, Brass1, Brass2, etc.”

10 - Completing a Declaration with Multiple Parts

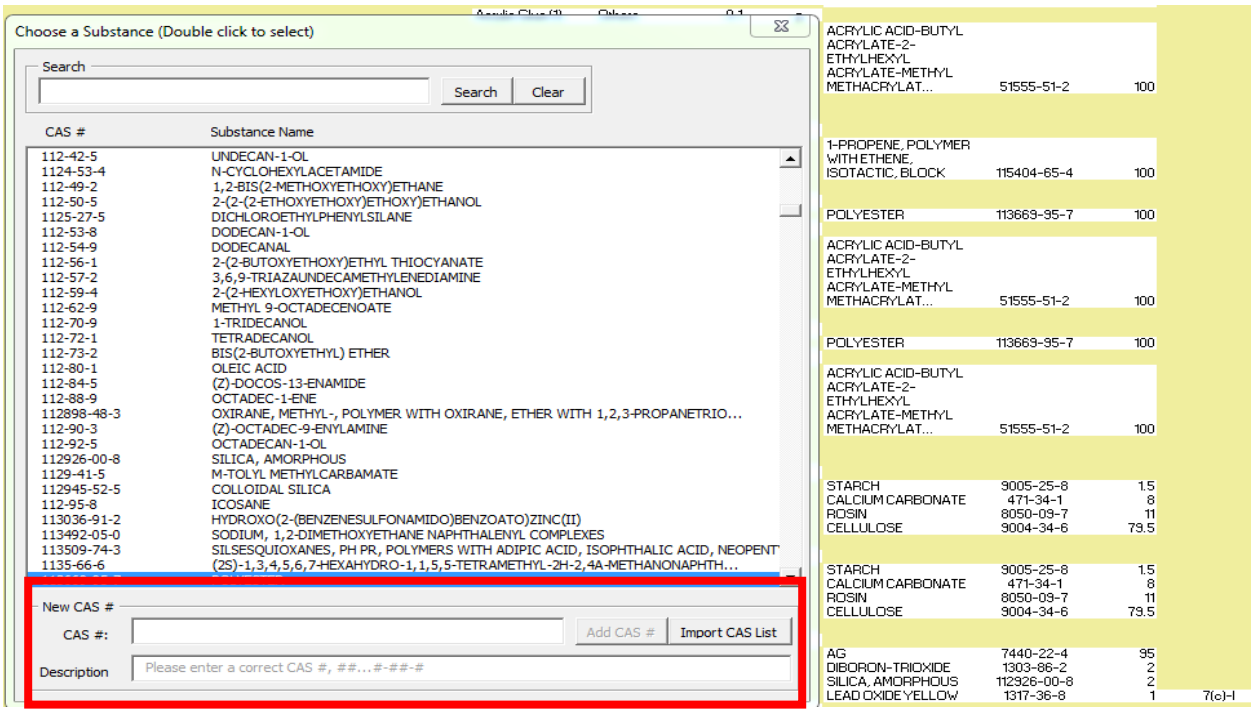
In some instances, the SCF will contain more than 1 part on the same MD. There will be space between each part # to populate the material data but in many cases, more rows will need to be added. Please refer to Section 11 for adding/removing rows of this document. It is important to note that multiple part declarations can be completed manually either by actual manual data entry or by copying and pasting. The SCF also allows importing multiple files. Refer to Section 9 for details on importing multiple files.

11 - Adding a Row

To add a row, highlight a blank cell in Column D and drag it across to Column S. Doing this will bring up the “Insert Rows” box. Select how many rows you would like to add and then click on the “Insert Row” button. The inserted rows will be added below the highlighted line. The same process can be repeated to delete a row as well. **IMPORTANT NOTE:** Row 12 is locked. Cells must be selected at Row 13 or below.

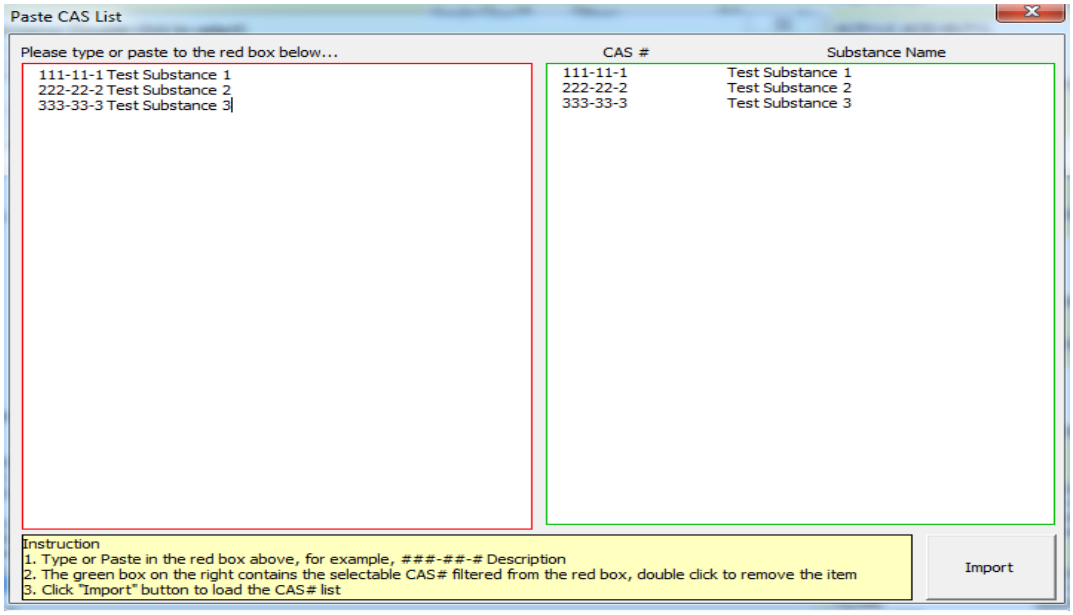
12 - Adding a CAS # to the CAS List

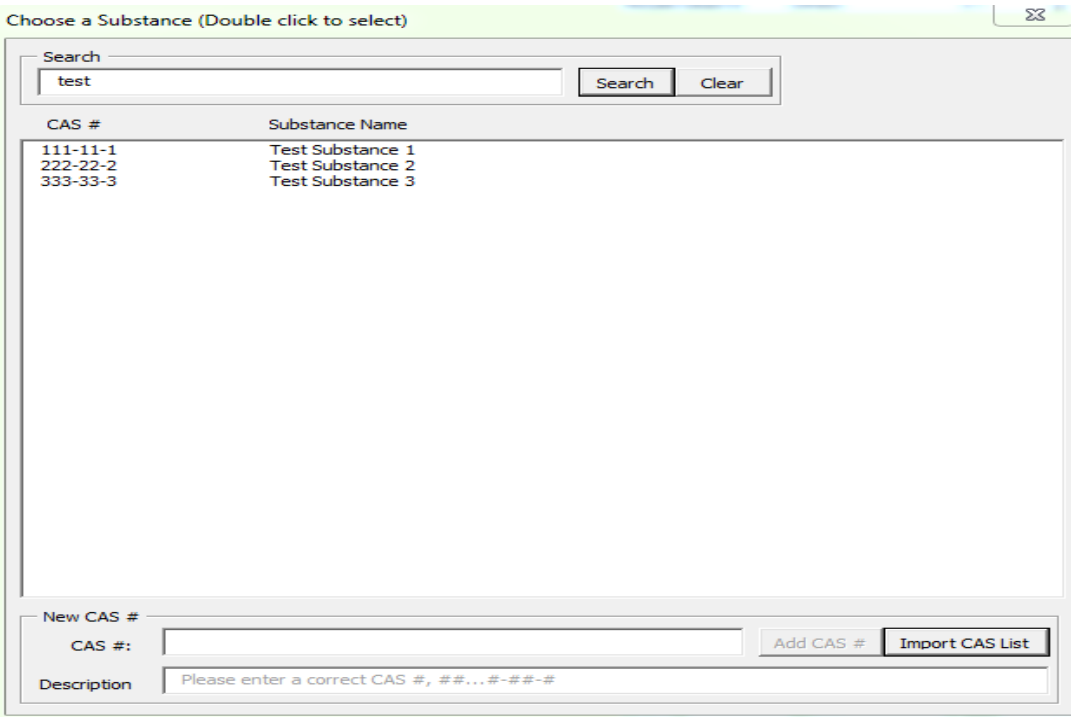
The SCF will also allow for CAS #’s not listed in the pop-up window to be added to the SCF. Enter the complete CAS # and substance name description in the boxes located at the bottom of the pop-up window labeled “New CAS #”. Then click on the “Add CAS #”. **IMPORTANT NOTE**: it is best practice to search on the CAS # as opposed to the substance name. This will help to ensure data accuracy in selecting the correct chemical for that Homogeneous Material.



When multiple CAS #'s need to be added to the list, the SCF allows for the import of several CAS #'s into the form by using the Import CAS List button.

a. Click on "Import CAS List".
b. The CAS # can be manually typed in or pasted from another file into the Red Box
c. The text must be entered with the CAS # first in the XXX-XX-X format followed immediately by the Substance Name separated by a single space. Valid text will then appear in the Green Box next to the Red Box.
d. Once finished, click on the Import button.
e. The newly added CAS #'s will now be searchable and appear in search results and can be added to the Substance Section.

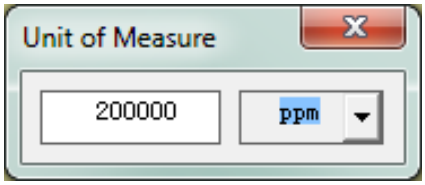




13 - Entering Weight Information

After selecting the substance name and CAS #, the % of material must be entered. This is also selected from a drop down box and is expressed in either a %, Grams (g), Milligrams (mg) or in Parts per Million (PPM). **Any Unit of Measure can be selected but the form will automatically convert all entries to percentage of the total weight of the Homogeneous Material.**

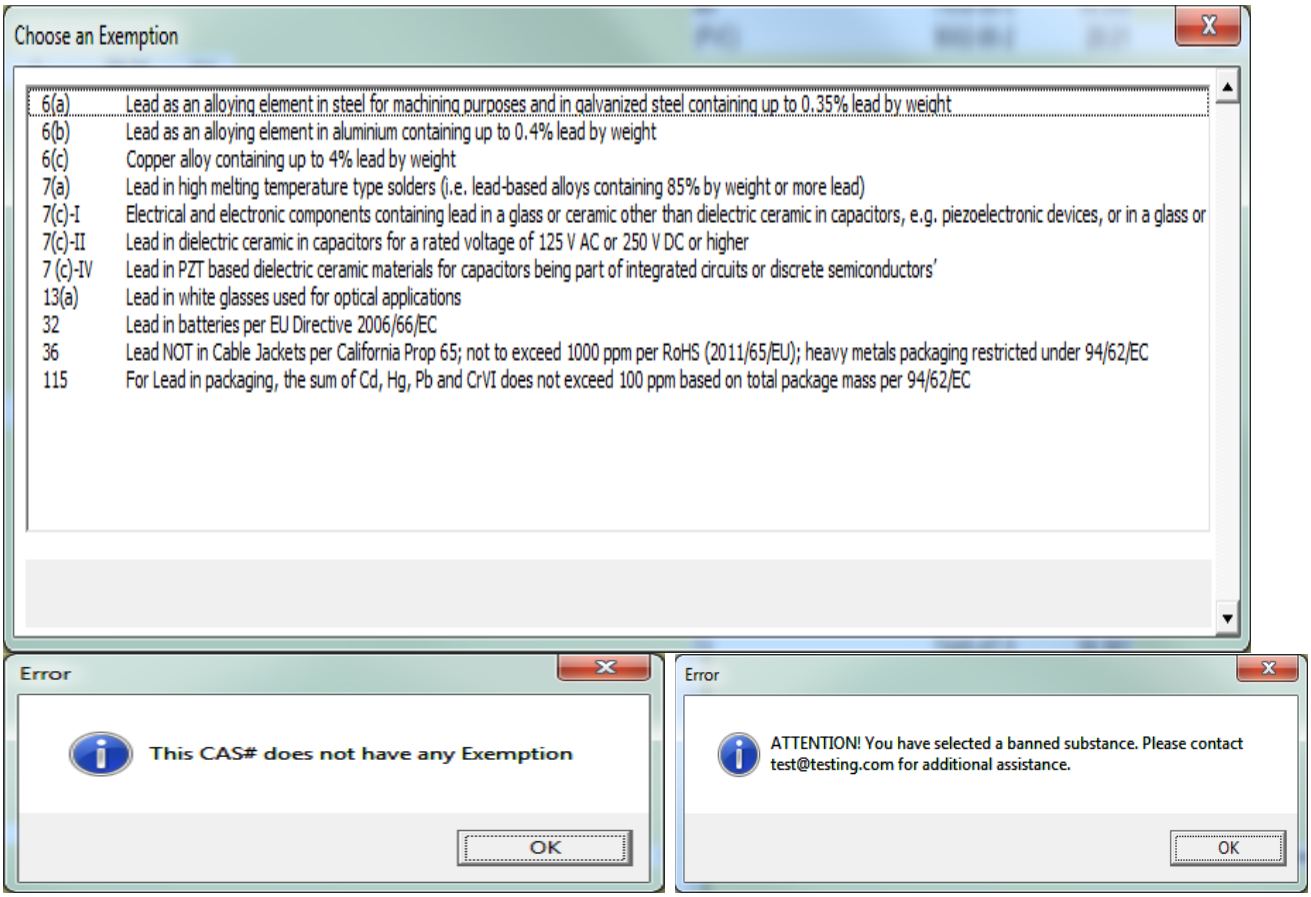
IMPORTANT NOTE: All weights entered in Column R will automatically be converted to %. If entering weights in Grams, PPM, or Milligrams, please take note of the weight indicated as it will be automatically converted to a % with no reference to what was previously entered. Weights MUST total 100% of the weight of the homogeneous material in order for the SCF to successfully export.



14 - Selecting Exemptions

Once the % of material has been recorded, any applicable exemptions must be added. Note that by clicking in the “Exemption” column, the SCF will prompt whether an exemption is required or not.

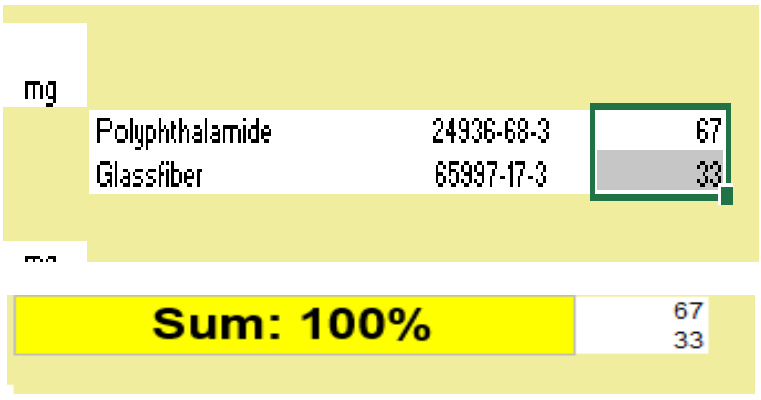
For example, if Lead is selected, the SCF will display a list of RoHS exemptions and Zebra internal exemptions that apply only to Lead. Double click an exemption to select it. The same principle applies for any other controlled or restricted substances that are found in the CPZ-CE-010 Environmental Compliance Specification.



IMPORTANT NOTE: if a banned substance is selected, a prompt will appear indicating an error has occurred and to contact a Zebra representative for further instructions. Consequently, if the substance does not have an exemption to claim, the form will display that as well.

15 - Performing a Weight Check

It is important to perform a weight check to ensure that the weight of the substances equals the weight of the homogeneous material. If there is a weight discrepancy, the declaration will not export until the weight totals to 100% of the homogeneous material. To check the weight, drag the cursor to highlight the weights in the "% of Material" column for a specific Homogeneous Material and drag it down. Clicking anywhere in the form will remove the sum.

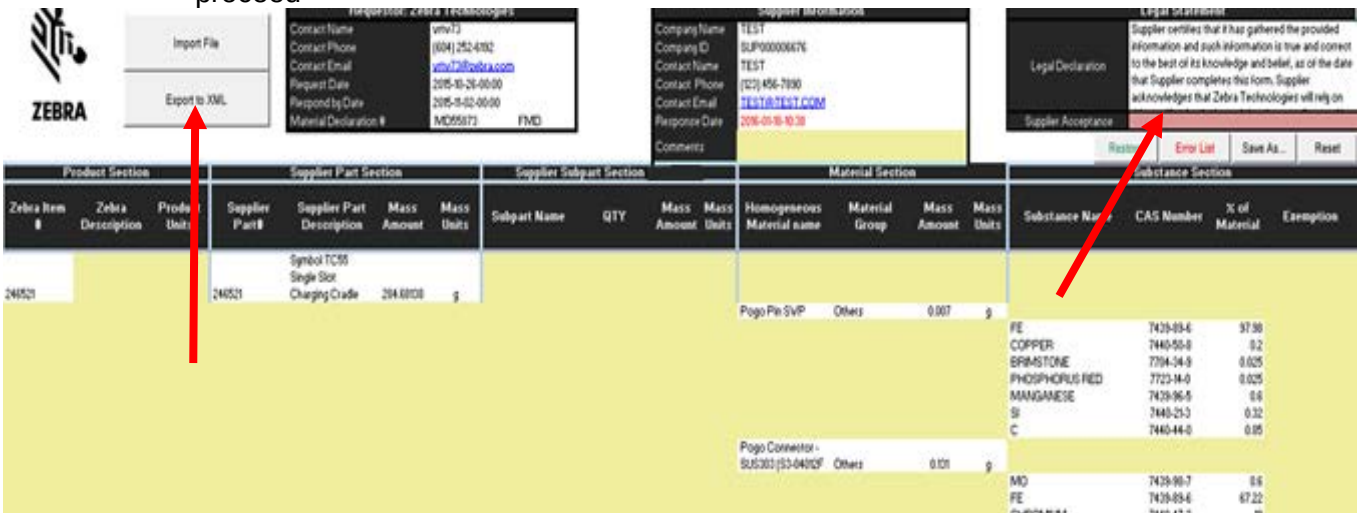


16 - Generating an XML Declaration

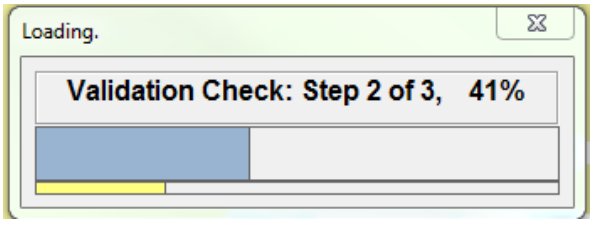
To generate a declaration, click on the "Export to XML" button located in the upper left portion of the spreadsheet to begin the error checking process. **IMPORTANT NOTE**: the Legal Declaration must be accepted in order to export an XML declaration. If the legal declaration is declined, the form will not export an XML declaration.

a. To accept the legal declaration, simply click in cell Q7 (highlighted in red) and then click on "Accept" when the legal declaration pops up

b. Once accepted, the box will turn Green and allow the Export to XML process to proceed

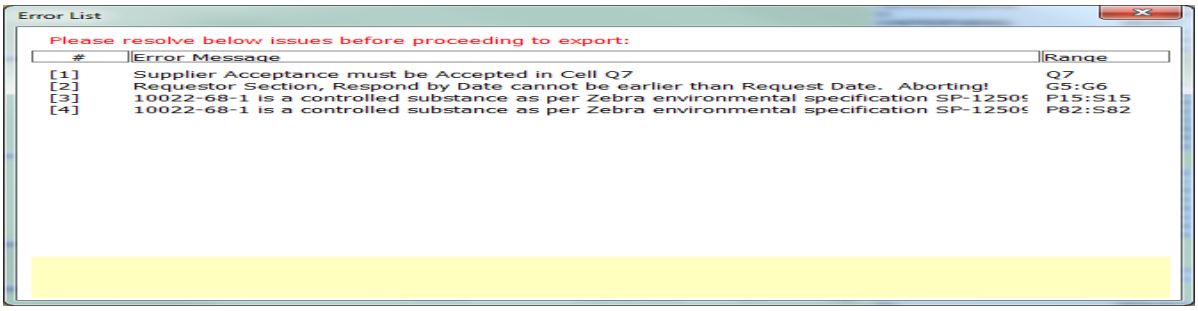


Please note that in addition to the export status boxes, the status of the export is also indicated in the lower left hand corner of the MS Excel Window.

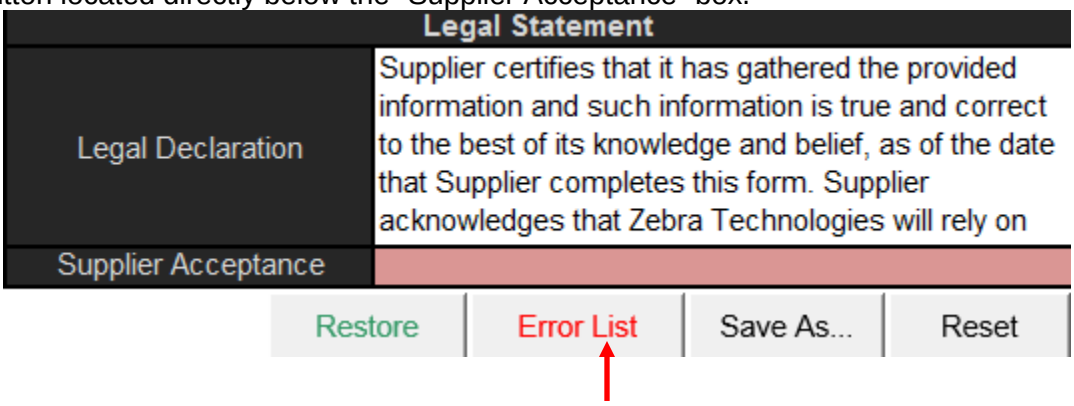


17 - Error List

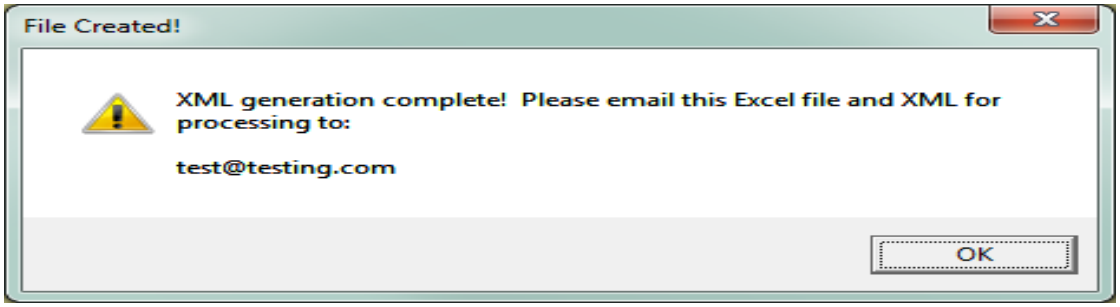
Once the error check completes, it will generate a list of errors which must be addressed before creating an XML declaration. The error list will look like something similar to this:



To resolve an error, double click on one of the numbered lines. Upon doing so, the form will highlight for quick resolution the cell or cells affected. **IMPORTANT NOTE: once an error is double clicked, it will be removed from the error list. If the error is not resolved – either by an applicable exemption application, a change to the chemical chosen, or acceptance of the Legal Statement - the error will reappear on the error list when the Export to XML function is utilized again.**
Once an error is resolved, the error list can be retrieved at any time by clicking on the "Error List" button located directly below the "Supplier Acceptance" box.

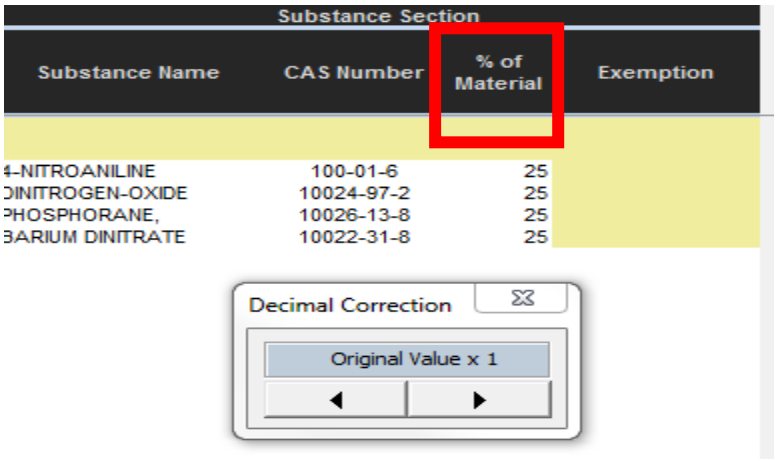


Once all errors have been addressed, the error list button will disappear and an XML declaration can be created. Please specify a location to save the declaration to. A prompt will then appear giving direction to submit the completed SCF file and the XML declaration back to the Zebra representative who initially sent the MD request. Click "OK" to complete this task.



18 - Decimal Place Adjustment

In the event a file is imported and the decimal places in Column R need to be adjusted, this can be done by clicking on cell R10. Once this is done, a pop-up box will appear allowing the decimal place to be adjusted to the left or right. This functionality is important when the original data has been collected in PPM (parts per million) units.

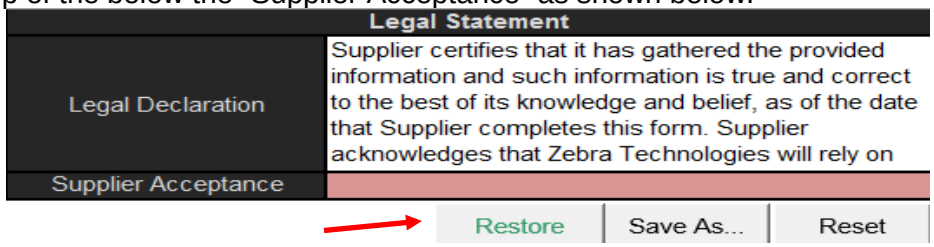


19 - Auto-Save Functionality

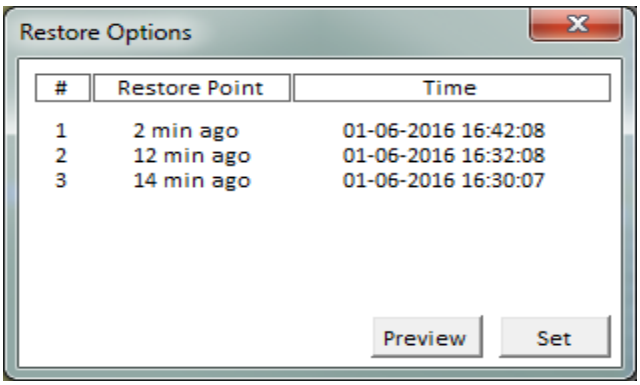
It is **EXTREMELY IMPORTANT** to note that the SCF uses the Auto-Save functionality to help ensure that no work is lost when the form is closed down. As a result, if changes are made to the form in error, there is no way to go back to an older version unless someone completing the form performed a “Save-As”. Users are encouraged to note this point and use the “Save-As” feature as necessary.

20 - Restore Function

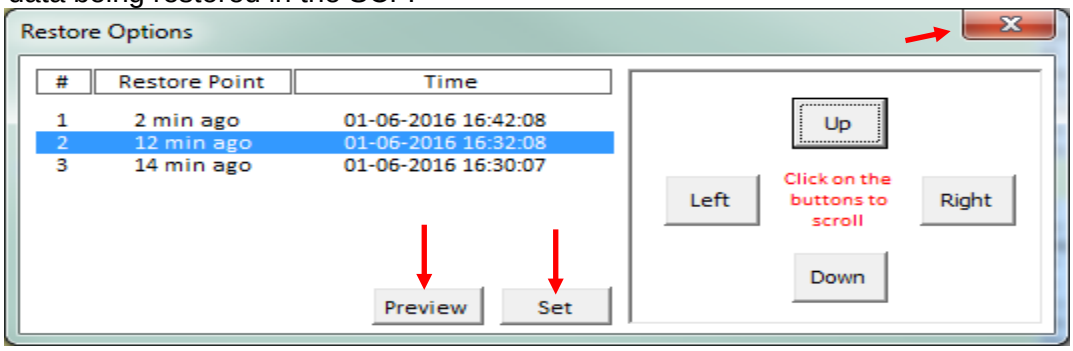
If the form needs to be reverted back to an older version, the restore capability will help accomplish this. The SCF will take a snapshot of itself each time the reset button is clicked, an import is performed, and every 10 minutes while the form is open. The “Restore” button will appear at the top of the below the “Supplier Acceptance” as shown below.



When the Restore button is clicked, a series of possible restore points are displayed along with the option to preview what the restore point would look like.



To preview a restore point, select one of the restore points (each line item above is a restore point) and click on the Preview button. The preview option will allow the user to scroll and review the data being restored in the SCF.

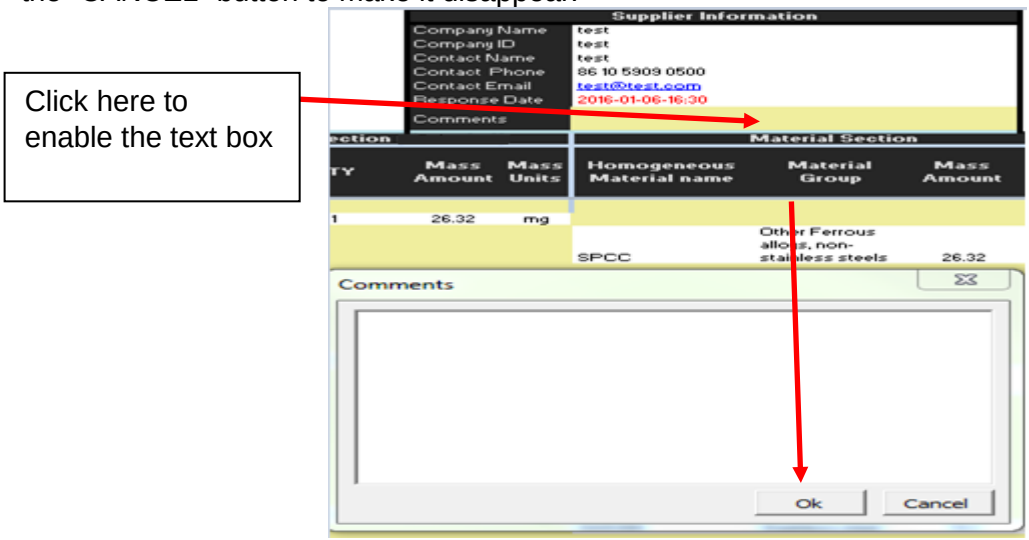


To restore the SCF to an earlier point, click on Set and the form will then revert back to that point. If the user does not wish to complete the restore function and wants to continue working on the current version, simply click on the “X” in the top right corner to close the box and resume working on the SCF.

21 - Comments Box

Should the need exist to add a note to a Zebra representative, further explain a substance selection, or wish to include a comment for any other reason, this can be done by using the Comments box located in the Supplier Information header at the top of the SCF.

Click in the comments box located in cell J8 and a text window will appear. Any free form text can be entered in the comments box by either manually typing or by pasting. Once entering text is complete, click on the “OK” button. If the comments box was clicked in error, simply click on the “CANCEL” button to make it disappear.



The Comments box is available for use at all times during the SCF completion.
IMPORTANT NOTE: text in Comments text box is not included in the error checking process and will not appear as part of the final XML declaration.

22 - Special Characters

A note about using special characters – as illustrated in the REMINDER box, bullet point #5, when initially opening the form, special characters will automatically be converted to a dash in order for the SCF to export and then import properly into the database. Once the declaration has been imported, the special characters will remain intact. The form will accept:

~	'	=	(	$	?	}	.
`	,	[	)	^	/	|	-
!	<	]	%	&	\	;	_
@	>	{	#	*	+	:	“

IMPORTANT NOTE: the quotation marks character, highlighted in RED is not an acceptable character and is not compatible with the SCF.

23 - FREQUENTLY ASKED QUESTIONS:

QUESTION:	ANSWER:
Why won’t the SCF open in my version of Microsoft Office?	The SCF was verified to be compatible in Microsoft Office 2003 or newer as well as 32/64 bit environments. Verify the version of Microsoft Office running on the computer is 2003 or newer. Please also note that the SCF will run slower on machines running Office 2003. Please contact your Zebra representative if you continue to experience compatibility issues.
Where can I find the Zebra environmental compliance specification?	Zebra's environmental specification is located on its corporate website at the following link: http://www.zebra.com/compliance-SCF If you are experiencing issues accessing the specification, please contact your Zebra representative and a copy of the specification can be e-mailed to you.
Why can’t I edit the supplier part #?	The supplier part # is locked and can only be edited by an authorized Zebra representative. This is to ensure data integrity is maintained in our system during the importing declaration process. Please contact a Zebra representative immediately if there is an issue with the supplier part #.
Why can’t I add a new CAS #?	Ensure that in addition to adding the CAS # in the New CAS # section of the CAS # list that you are also adding a description. The SCF needs to have both a CAS # and a description in order to generate a new CAS #.
The error list is showing the following error: "10022-68-1 is a controlled substance as per Zebra environmental specification CPZ-CE-010". How do I resolve this?	This error indicates a controlled substance has been specified above the maximum allowable threshold per Zebra's environmental spec. You will need to select a valid exemption to eliminate the error.

I've opened the SCF to start a declaration and have also opened another Excel file to populate the SCF from an e-mail attachment. The second Excel file does not have a ribbon bar and I cannot copy/paste data from the file. How do I fix this?	The second Excel spreadsheet has inherited the sheet protection from the SCF. This happens in Microsoft Office 2010 and newer. Close the secondary spreadsheet then re-open it. This will reactivate the file and remove the inherited protection from the SCF.
I'm trying to import a .MCC file but it is not importing correctly. How do I fix this?	Some .MCC files are structured differently than others. We will need to "reset" the .MCC file then re-import it. 1. Export the .MCC file to a tab delimited file 2. Import the Tab delimited file into a blank ICC form 3. Certify and export the ICC form 4. Import the new .MCC file into the SCF
Why is the Export to XML error checking process taking so long?	Note that the larger the SCF, the longer the error checking process will take after clicking "Export to XML". This is a normal operation of the SCF. It is typical for an SCF file with 8,000-10,000 rows of data to take anywhere from 10-15 minutes to complete error checking.
What can I do to help speed up the error checking process on a large file?	To help speed up the process, take a look at the subparts listed throughout the SCF and make sure each one has a unique name. For example, if "CABLE" or "IC" is listed more than once, the SCF will flag that as an error and the more errors present in the SCF, the longer the error checking will take. Ensuring there are as little duplicate sub-parts as possible and also ensuring all of the proper exemptions are selected where applicable will help to speed up the error checking process.
The cursor won't go past Column N when adding a row. Why can't I add a row?	The SCF is locked at Rows 11 and 12. Data cannot be inserted at these rows. Ensure rows are being added at Row 13 or below.
The weights of the substances do not equal up to 100% of the homogeneous material. How should I proceed?	In the event the total substance weights are less than 100%, the "MISC, NOT TO DECLARE" entry from the CAS # list can be selected and the missing percentage can be used to total up to 100%.

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