

GDM QUICK REFERENCE GUIDE:

GENERATING COMPLIANCE ANALYSIS REPORTS FOR PFAS

Table of Contents

Intro	oduction	2
A - I	dentify PFAS from All Parts in the Item Master	4
1.	Identify PFAS from All Parts Through Navigation	4
2.	Identify PFAS from All Parts Using Substance Inquiry Report	6
3.	Identify TSCA 8(a)(7) - PFAS from All Parts Using Substance Inquiry Report	9
4. Inq	Identify Canada CEPA 71(1)(b) Schedule 1 - PFAS from All Parts Using Substandury Report	
B - Id	dentify PFAS from Your BOMs	15
5.	Identify Parts with PFAS from BOMs Through Navigation	15
6.	BOM Level Report on Master PFAS Scan Rule	18
7.	BOM Level PFAS Report on TSCA 8(a)(7)	21
8.	BOM Level PFAS Report on Canada CEPA 71(1)(b) Schedule 1	24
C – (Generate Aggregated TSCA 8(a)(7) PFAS Reports on BOMs	28
9.	View TSCA 8(a)(7) PFAS Compliance Data	28
10.	Generate the TSCA 8(a)(7) PFAS report for your BOM	30



Introduction

General:

This document describes and presents step-by-step instructions for generating compliance reports for **PFAS** regulations and requirements using GreenData Manager (GDM).

PFAS Regulations and Requirements:

Per- and Polyfluorinated Substances (PFAS) have become a hot topic recently in many countries and regions. In order to remove such hazardous substances from the marketplace, many countries and regions have set established requirements for manufacturers to declare the presence of PFAS in products. GreenSoft has developed processes to help you identify PFAS in your products easily using GDM software.

For manufacturers that need to identify any PFAS substance in their products to meet requirements such as those from Minnesota, GreenSoft has developed a "**Master PFAS scan**" rule built into GDM, which uses an aggregated list of PFAS substances compiled from the sources below:

- (1) OECD PFAS Substances List
- (2) EPA PFAS Substances List
- (3) TSCA 8(a)(7) PFAS Substances List
- (4) IEC 62474 PFAS Substances List
- (5) Canada CEPA 71(1)(b) Schedule 1
- (6) Other PFAS substances identified by GreenSoft

Rule Details

Name: Master PFAS scan

Per- and Polyfluoroalkyl Substances (PFAS), a class of organic chemicals containing at least one fully fluorinated atom. Substances included in the OECD, EPA PFAS substance lists, TSCA 8(a)(7), IEC 62474 PFAS substance

and substances in Canada CEPA 71(1)(b) Schedule 1.

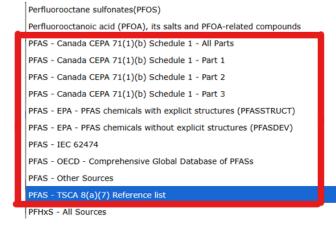
Exemption Group:

To perform the **substance inquiry** on a specific PFAS substance group, GreenSoft has separated them into different substance groups so that you can easily perform the **substance inquiry** on these groups as listed below:

- (1) Canada CEPA 71(1)(b) Schedule 1
- (2) PFAS EPA PFAS chemicals with explicit structures (PFASSTRUCT),
- (3) PFAS EPA PFAS chemicals without explicit structures (PFASDEV)



- (4) PFAS IEC 62474
- (5) PFAS OECD Comprehensive Global Database of PFASs
- (6) PFAS Other Sources
- (7) PFAS TSCA 8(a)(7) Reference list.



In this document, we will show you (1) how to identify the PFAS substances from your Item Master and generate PFAS reports, and also (2) how to identify the PFAS substances from your products (BOMs) and generate the BOM level PFAS reports, and if GreenSoft is doing the data collection on TSCA 8(a)(7) PFAS collection for you with the functional category codes on identified PFAS substances, then we will show you on (3) how to generate the aggregated TSCA 8(a)(7) PFAS report on your BOMs.

A - Identify PFAS from All Parts in the Item Master

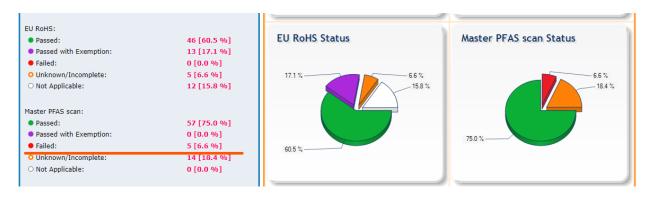
To identify any PFAS substance (including the specific PFAS substances listed under TSCA 8(a)(7) or Canada CEPA 71(1)(b) Schedule 1) in the parts that build your products, there are a few ways you can do this using GDM - (1) you can set up one of the displayed rules as the "Master PFAS scan" rule, or (2) you can use the **Substance Inquiry** report on "Master PFAS rule", or (3) you can use the **Substance Inquiry** report to validate all parts on the substances listed by **TSCA** 8(a)(7) – PFAS, or (4) you can use the **Substance Inquiry** report to validate all parts against the substances listed by Canada CEPA 71(1)(b) Schedule 1. All these methods are explained below.

1. Identify PFAS from All Parts Through Navigation

Check on the displayed rule: you can either set up the "Master PFAS scan" rule as one of the 6 displayed rules, or you can designate the "Rule 2" as the "Master PFAS scan" rule in the Item Master page – as shown below.

Item Master Note: Parts maintained in GDM are having the unique combination of IPN + MFG + MPN. Rule 2 for Charts: Master PFAS scan ☐ Exclude alternate parts ☐ Exact match for Internal/Manufacturer PN Switch to Extended Minerals View Switch to Conflict Minerals View Action Panel - Search: (use '_' and '%' as wildcards to assist with your search) Total Number of Parts: Internal PN: Manufacturer PN: Search Total Number of Parts - Internal PN (IPN): 62 Total Number of Parts - Manufacturer PN (MPN): 74 Manufacturer Code: Manufacturer: Total Number of Manufacturers (MFG): Part Series/Family: Description: Number of Unmatched Parts: User Defined < Not Selected Action Panel - List: Manage Search: Select Search Number of Dropped Parts: View RoHS Exemption List View History/Statistics Generate CA Prop 65 Report Total Number of Processable Parts: **View Reports** View REACH Reportable SVHC

1.1 Once you set up the "Rule 2" as the "Master PFAS scan," you can see the rule status of Rule 2 in the Item Master page as shown below – (the numbers below are for illustration purposes only; your numbers should look different than the ones shown below.)



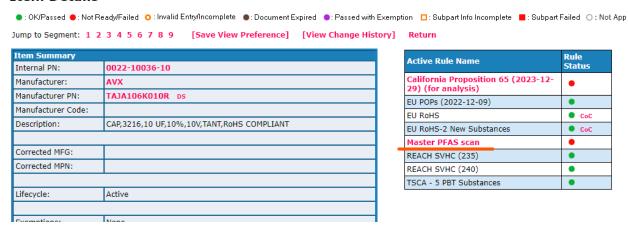


1.2 You can check on the failed parts by clicking on the number from the table on the left-hand side, or click on the red section of the "Master PFAS scan Status" pie chart on the right-hand side. GDM will show you the list of parts from the Item Master that contain one or more PFAS substances – as shown below.

#	Internal PN	Manufacturer	Manufacturer PN	Description	Requirement Status	MCD Type	MCV Version
1	0022-10036-10	AVX	TAJA106K010R	CAP,3216,10 UF,10%,10V,TANT,RoHS COMPLIANT	Passed	Full Disclosure FMD	
2	BATG-BR1632R81- B	RAYOVAC	BR1632R81-B	BAT,BR1632R81- B,SRFCMNT,16X3.2mm,3.3V,RO	Passed	Full Disclosure	
3	BATG-BR1632R81- B	RAYOVAC	BR1632R81-BA	BAT,BR1632R81- B,SRFCMNT,16X3.2mm,3.3V,RO	Passed	Full Disclosure	
4	BATG-BR2335SM-B	RAYOVAC	BR2335SM-B	BAT,BR2335SM- B,300MAh,3V,SMT,ROHS	Passed	Full Disclosure	
5	BATG-BR2335SM-B	RAYOVAC	BR2335SM-BA	BAT,BR2335SM- B,300MAh,3V,SMT,ROHS	Passed	Full Disclosure	

1.3 You can also find out what specific PFAS substance(s) each part contains by clicking on the Internal part number of the failed part. GDM will show you the Item Details of the selected part – as shown below.

Item Details



- 1.4 Clicking on "Master PFAS scan" under Active Rule Name will show you the PFAS substance(s) contained in this part, as shown below.
- 1.5 The example below shows a part containing PTFE, which is one of the PFAS substances, and the substance is included in 5 different substance groups. The substance PTFE is also contained in the subpart of "anode body" with a concentration of 374.755 ppm.



Item Failure Analysis

This page shows the list of substances that fail to comply the rule.

Note: Failure analysis at Item level ignores the Proprietary Substance Processing setting in the System Parameters.

Internal PN: 0022-10036-10 Manufacturer Code:

Manufacturer Name: AVX Manufacturer PN: TAJA106K010R

Part Mass (g): 0.029 **Rule Profile**

Rule Name: Master PFAS scan

Rule Description: Per- and Polyfluoroalkyl Substances (PFAS), a class of organic chemicals containing at least one fully fluorinated atom. Substances included in the OECD, EPA PFAS substance lists, TSCA 8(a)(7), IEC 62474 PFAS substance and substances in Canada CEPA 71(1)(b) Schedule 1.

Rule Substance Name	Туре	Threshold	Units	Notes	Homogeneous (MCV)	Subpart Name	Subpart Mass (g)	Туре	Substance Name	CAS Number	Applicable Weight (g)	Homogeneous (ppm)
PFAS - OECD - Comprehensive Global Database of PFASs	Group	0.000	ppm		374.755	ANODE BODY	0.016811000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000006300000	374.755
PFAS - TSCA 8(a)(7) Reference list	Group	0.000	ppm		374.755	ANODE BODY	0.016811000000		Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000006300000	374.755
PFAS - IEC 62474	Group	0.000	ppm		374.755	ANODE BODY	0.016811000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000006300000	374.755
PFAS - EPA - PFAS chemicals without explicit structures (PFASDEV)	Group	0.000	ppm		374.755	ANODE BODY	0.016811000000		Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000006300000	374.755
PFAS - Canada CEPA 71(1)(b) Schedule 1 - Part 2	Group	0.000	ppm		374.755	ANODE BODY	0.016811000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000006300000	374.755

You can also find out the BOMs that have used this part containing a PFAS substance by 1.6 first clicking on "Return" from the Item Failure Analysis page, and GDM will take you back to the Item Details page. You can then navigate to the bottom of the page, and you should see the "Where Used" table, which will show the BOMs that have used this part. With that, you can learn the impact of the PFAS on your products.

Whe	ere Used				
#	BOM ID	BOM Name	Project Name	Location	Revision
1	C22	Control Board M2290, DIV-22-0.9		Hawaii	
2	C1	Control Board M550 from DIV-1		Hawaii	
3	C3	Control Board M550 from DIV-1		Hawaii	
4	B16	Control Board M609 V2, DIV B from Location 2		Utah	
5	B17	Control Board M2290, DIV-B from Location 2		Utah	
6	C199	Control Board M550 from DIV-1		Hawaii	
7	FC15	Forklift Controller	Pegasus	Hawaii	
8	C22-Simple SuperBOM	Control System M2290, DIV-22-0.9		Pasadena	
9	AT100	Wireless Router	Advantage	Hawaii	

2. Identify PFAS from All Parts Using Substance Inquiry Report

Generate the "Substance Inquiry" report with "Master PFAS scan" rule: click on "View **Reports**" from the Item Master page, as shown below.



Item Master Note: Parts maintained in GDM are having the unique combination of IPN + MFG + MPN. Rule 2 for Charts: EU RoHS-2 New Substances ☐ Exclude alternate parts ☐ Exact match for Internal/Manufacturer PN Switch to Extended Minerals View Switch to Conflict Minerals View Action Panel - Search: (use '_' and '%' as wildcards to assist with your search) Total Number of Parts: Internal PN: Manufacturer PN: Search Total Number of Parts - Internal PN (IPN): 62 Reset Total Number of Parts - Manufacturer PN (MPN): 74 Manufacturer Code: Manufacturer: Total Number of Manufacturers (MFG): Description: Part Series/Family: Number of Unmatched Parts: User Defined <Not Selected> Action Panel - List: Manage Search: Select Search Save Search Number of Dropped Parts: n View RoHS Exemption List View History/Statistics Generate CA Prop 65 Report Total Number of Processable Parts: View REACH Reportable SVHC 76 View Reports

2.1 Click on "Queue new report" from the "Item Master Report Details" page, as shown below.

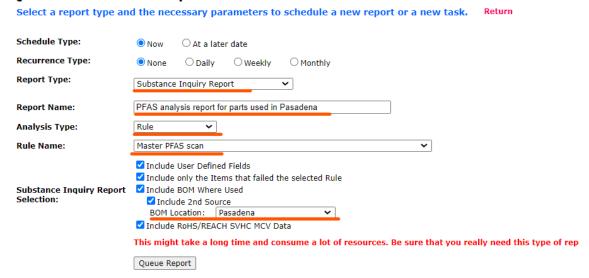
Item Master Report Details Select an existing report to view or click appropriate links to queue a new report. Total Number of Reports: 126 Now displaying page 1 of 3. Reports per page: 50 ▼ [Previous] [Next] Date: Most recent only and suppress duplicates ▼ Report Type: [

- 2.2 You can perform the substance inquiry on substances listed under the Master PFAS scan rule and only display the parts that are used in products built at the Location of your division such as "Pasadena" as shown in the example below. Do the following:
 - Go to the "Queue Item Master Report" page.
 - Select "Substance Inquiry Report" from Report Type.
 - Select "Rule" from Analysis Type.
 - Select "Master PFAS scan" as the Rule Name
 - Check the appropriate selection from the options below:
 - Check "include User Defined Fields" which will show all selected User Defined Fields in the report, check "include only the Items that failed the selected Rule" which will show only the parts that failed the Master PFAS scan rule, and check "include BOM Where used" which will show the associated BOMs for the failed parts when the failed parts are the primary source in the associated BOMs. If you want to show the BOMs that use the failed parts as the second source parts, then check "Include 2nd source." You can also further filter the associated BOMs by adding the Location select the Location from the BOM Location as "Pasadena" in the example below.
 - Check "Include RoHS/REACH SVHC MCV data" which will examine the PFAS
 (based on the substances listing from Master PFAS scan rule) on parts with
 FMD data and also on parts without FMD but with RoHS or REACH SVHC MCV



data (for parts with only the compliance statements on RoHS/SVHC, GreenSoft data team would present the RoHS/SVHC data in MCV form, which is showing the Maximum Concentration Value).

Queue Item Master Report



- 2.3 You can click on "**Queue Report**," as shown above, to generate the report on the spot, or change the Schedule Type and Recurrence Type to generate the report at a later time with a fixed interval.
- 2.4 Once the report is generated, you can go to the "Report" tab to see the Report Statistics and click on the number on the Substance Inquiry Report to access the report, as shown below.

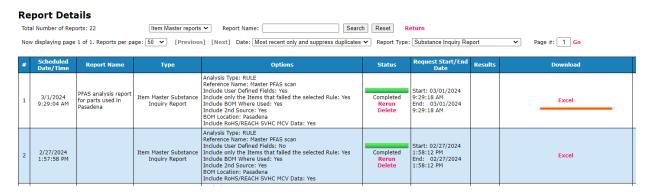
Green Data Manager BROWSER EDITION System Manufacturers Active Rules Notifications Item Master Bill of Materials SCIP Management Reports Report Statistics Note - report count is computed by filtering the most recent only and suppressing duplicates. Display: All Report Name: Search Reset Generate Custom Report

#	Item/BOM	Report Type	Report Count
1	Item Master related [127]	Conflict Minerals Report - Company	8
2		Extended Minerals Report - Company	1
3		Grand Report	37
4		Substance Analysis Report	48
5		Substance Inquiry Report	22
6		Substance Matrix Report	11
7	BOM related [455]	BOM Compliance Summary	29

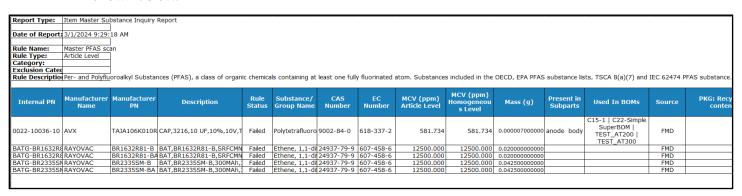
2.5 Search the report based on the Report Name you have provided and click on "**Excel**" to download the report in Excel, as shown below.

Tasks





2.6 You can then open the downloaded Excel report, which will show you the list of parts that contain the PFAS per the substances listed under the "**Master PFAS scan**" rule, and the info on the PFAS substance(s) with the associated BOMs and Subpart. The sample report is shown below.



3. Identify TSCA 8(a)(7) - PFAS from All Parts Using Substance Inquiry Report

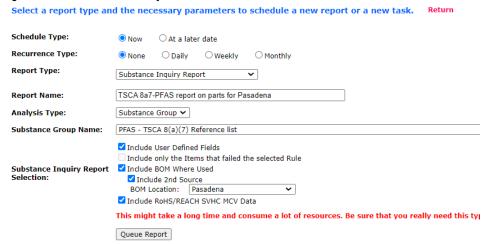
If you need to find out what parts from the Item Master contain the PFAS substances associated with **TSCA 8(a)(7) - PFAS**, you can also leverage the Substance Inquiry report. **Please note** – regulation of "TSCA 8(a)(7)" has many other requirements besides the disclosure of PFAS substances. GDM software will only cover the analysis of PFAS substances on your parts. For other requirements on this regulation, please check the details of the regulation from your end.

- 3.1 From the "Queue Item Master Report", you can set up the report by selecting the following:
 - Select "Substance Inquiry Report" from Report Type.
 - Select "Substance Group" from Analysis Type.
 - Select "PFAS TSCA 8(a)(7) Reference List" as Substance Group Name
 - Check the appropriate selection from the options below:



- Checking "include User Defined Fields" will show all selected User Defined Fields in the report. This will gray out "include only the Items that failed the selected Rule" since there will be no parts failed on any rule as the GDM software would only perform the analysis on the substance group level. Checking "include BOM where used" will show the associated BOMs for the parts with the designated PFAS substance(s) when the parts are the primary source in these associated BOMs. If you want to show the BOMs that use the parts with the designated PFAS substances as the second source parts, then you can check "Include 2nd source." You can also further filter the associated BOMs by adding the Location select the Location from the BOM Location as "Pasadena" in the example below.
- Checking "Include RoHS/REACH SVHC MCV data" will examine the designated PFAS (based on the PFAS-TSCA 8(a)(7) substances listing) on parts with FMD data and also on parts without FMD but with RoHS or REACH SVHC MCV data (for parts with only the compliance statements on RoHS/SVHC, the GreenSoft data team would present the RoHS/SVHC data in MCV form, which is showing the Maximum Concentration Value.)

Queue Item Master Report

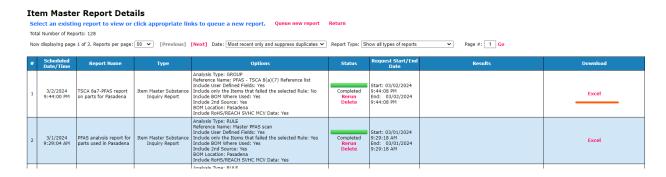


- 3.2 You can click on "**Queue Report**", as shown above, to generate the report on the spot, or change the Schedule Type and Recurrence Type to generate the report at a later time with a fixed interval.
- 3.3 Once the report is generated, you can go to "**Report**" tab to see the Report Statistics and click on the number on the Substance Inquiry Report to access the report, as shown below.

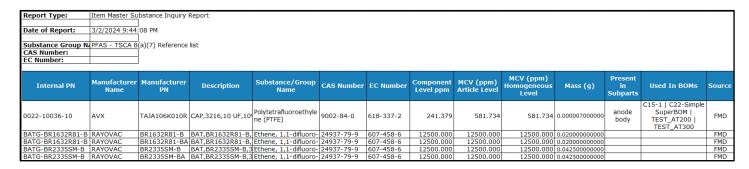


Green Data Manager BROWSER EDITION Manufacturers **Active Rules** Item Master **Bill of Materials** System Notifications SCIP Management Reports Tasks Report Statistics Note - report count is computed by filtering the most recent only and suppressing duplicates. Search Reset Generate Custom Report ✓ Report Name: Item/BOM Report Type **Report Count** 1 Item Master related [127] Conflict Minerals Report - Company 2 Extended Minerals Report - Company 3 Grand Report 37 4 Substance Analysis Report 5 Substance Inquiry Report 6 Substance Matrix Report 11 7 BOM related [455] BOM Compliance Summary 29

3.4 Search the report based on the Report Name you have provided and click on "**Excel**" to download the report in Excel, as shown below.



3.5 You can then open the downloaded Excel report, which will show you the number of parts that contain the PFAS per the "PFAS – TSCA 8(a)(7) Reference List", and the info on the PFAS substance(s) with the associated BOMs and location (Subpart). The sample report is shown below.



GreenSoft TECHNOLOGY, INC.

GreenData Manager®

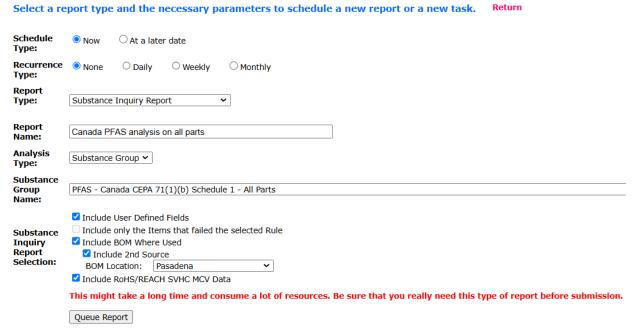
4. Identify Canada CEPA 71(1)(b) Schedule 1 - PFAS from All Parts Using Substance Inquiry Report

To find out what parts from the Item Master contain the PFAS substances associated with **Canada CEPA 71(1)(b) Schedule 1** for PFAS, you can also leverage on the Substance Inquiry report. **Please note** – the regulation of "Canada CEPA 71(1)(b) Schedule 1" has many other requirements besides the disclosure of PFAS substances. GDM software will only cover the analysis of PFAS substances on your parts. For information on other requirements outlined in this regulation, please refer to the full details of the regulation directly.

- 4.1 From the "Queue Item Master Report", set up the report by selecting the following:
 - Select "Substance Inquiry Report" from Report Type.
 - Select "Substance Group" from Analysis Type.
 - Select "PFAS Canada CEPA 71(1)(b) Schedule 1- All Parts" as Substance Group Name. (Please note: there are other groups related to PFAS-Canada CEPA 71(1)(b) Schedule 1; we recommend performing the PFAS analysis on the first group for all parts.)
 - Check the appropriate selection from the options below:
 - Checking "include User Defined Fields" will show all selected User Defined Fields in the report. Check this option if you need to show the data from the User Defined Fields. This will gray out "include only the Items that failed the selected Rule" since there will be no parts failed on any rule, as the GDM software will only perform the analysis on the substance group level.
 - Checking "include BOM where used" will show the associated BOMs for the parts with the designated PFAS substance(s) when the parts are the primary source in these associated BOMs. If you want to show the BOMs that use the parts with the designated PFAS substances as the second source parts, then you can check "Include 2nd source." You can also further filter the associated BOMs by adding the Location select the Location from the BOM Location as "Pasadena" in the example below.
 - O Checking "Include RoHS/REACH SVHC MCV data" will examine the designated PFAS (based on the Canada CEPA 71(1)(b) Schedule 1 substances listing) on parts with FMD data and also on parts without FMD but with RoHS or REACH SVHC MCV data. (For parts with only the compliance statements on RoHS/SVHC, the GreenSoft data team will present the RoHS/SVHC data in MCV form, which is showing the Maximum Concentration Value.)



Queue Item Master Report



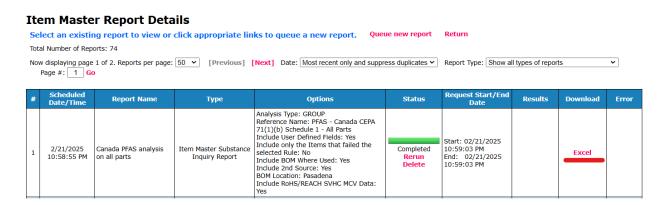
- 4.2 Click on "Queue Report", as shown above, to generate the report on the spot, or change the Schedule Type and Recurrence Type to generate the report at a later time with a fixed interval.
- 4.3 Once the report is generated, navigate to the "**Report**" tab to see the Report Statistics and click on the number in the Substance Inquiry Report to access the report, as shown below.

Green Data Manager BROWSER EDITION

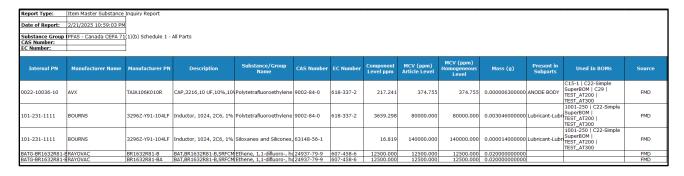


4.4 Search the report based on the Report Name you have provided and click on "**Excel**" to download the report in Excel, as shown below.



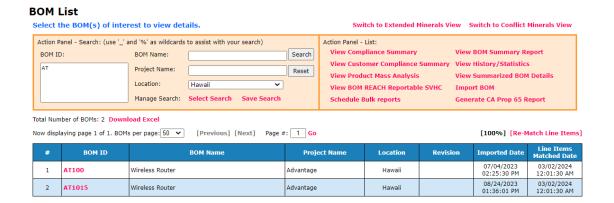


4.5 You can then open the downloaded Excel report, which will show you the number of parts that contain the PFAS per the "PFAS – Canada CEPA 71(1)(b) Schedule – All Parts", and the info on the PFAS substance(s) with the associated BOMs and location (Subpart). The sample report is shown below.



B - Identify PFAS from Your BOMs

To identify any PFAS substance in your products, there are few ways you can do this inside GDM - (5) you can set up one of the displayed rules as the "Master PFAS scan" rule, or (6) you can use the **Substance Inquiry** report on "Master PFAS rule", (7) you can also use the **Substance Inquiry** report to validate all parts from your BOMs on the substances listing from **TSCA 8(a)(7) - PFAS**, or (8) you can use the Substance Inquiry report to validate your BOMs against the substances listed by Canada CEPA 71(1)(b) Schedule 1. All these methods are explained below:

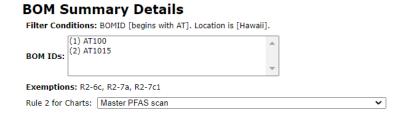


First, select the desired BOMs. Assuming we are to perform the PFAS analysis on the product family of "AT series" on the products developed in "Hawaii," we will then set up the filter conditions in either "BOM ID" or "BOM Name" or "Project Name" and choose the proper "Location" from the BOM List page, as shown above.

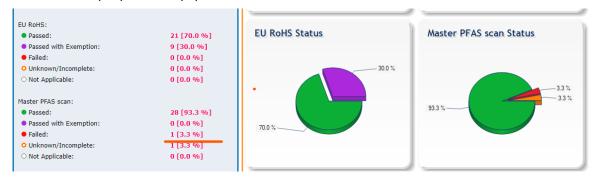
5. Identify Parts with PFAS from BOMs Through Navigation

Check the displayed rule: Once the designated BOMs are selected, click on "View Summary BOM Report" to start the PFAS analysis.

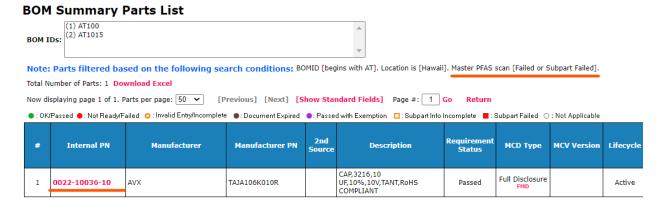
5.1 You can either set up the "Master PFAS scan" rule as one of the 6 displayed rules or you can designate the "Rule 2" as the "Master PFAS scan" rule – as shown below.



5.2 Once you set up the "Rule 2" as the "Master PFAS scan", you can see the rule status of Rule 2 in the BOM Summary Details page as shown below – (the numbers below are for illustration purposes only; your numbers should look different than the ones shown below.)

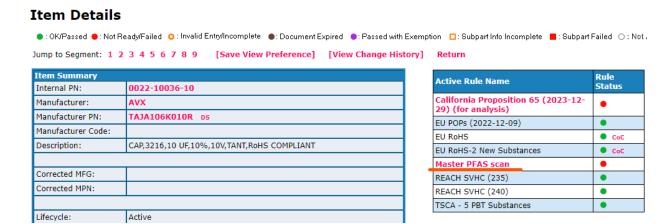


5.3 You can check on the failed parts by clicking on the number from the table on the left-hand side, or click on the red section of the "Master PFAS scan Status" pie chart on the right-hand side. GDM will show you the list of parts from the selected BOMs that contain one or more PFAS substances – as shown below.



5.4 You can find out what specific PFAS substance(s) each part contains by clicking on the Internal PN of the failed part. GDM will show you the Item Details of the selected part – as shown below.





- Click on the "Master PFAS scan" at the Active Rule Name will show you the PFAS substance(s) contained in this part, as shown below.
- The example below shows that this part contains PTFE, which is one of the PFAS substances, and the substance is included in 5 different substance groups. The substance PTFE is also contained in the subpart of "anode body" with a concentration of 581.734 ppm.

Item Failure Analysis This page shows the list of substances that fail to comply the rule.

Note: Failure analysis at Item level ignores the Proprietary Substance Processing setting in the System Parameters.

Item Profile

Internal PN: 0022-10036-10

Manufacturer Name: AVX Manufacturer Code: Manufacturer PN: TAJA106K010R

Part Mass (g): 0.029 **Rule Profile**

Rule Name: Master PFAS scan

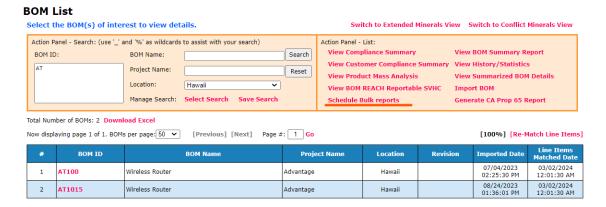
Rule Description: Per- and Polyfluoroalkyl Substances (PFAS), a class of organic chemicals containing at least one fully fluorinated atom. Substances included in the OECD, EPA PFAS substance lists, TSCA 8(a) (7) and IEC 62474 PFAS substance.

					Article	Article	Article Mass			CAS	Applicable	Article
Rule Substance Name	Туре	Threshold	Units	Notes	(MCV)	Name	(g)	Туре	Substance Name	Number	Weight (g)	(ppm)
PFAS - OECD - Comprehensive Global Database of PFASs	Group	0.000	ppm		581.734	Item	0.029000000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000007000000	241.379
						anode body	0.012033000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000007000000	581.734
PFAS - TSCA 8(a)(7) Reference list	Group	0.000	ppm		581.734	Item	0.029000000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000007000000	241.379
						anode body	0.012033000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000007000000	581.734
PFAS - IEC 62474	Group	0.000	ppm		581.734	Item	0.029000000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000007000000	241.379
						anode body	0.012033000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000007000000	581.734
PFAS - Other Sources	Group	0.000	ppm		581.734	Item	0.029000000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000007000000	241.379
						anode body	0.012033000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000007000000	581.734
PFAS - EPA - PFAS chemicals without explicit structures (PFASDEV)	Group	0.000	ppm		581.734	Item	0.029000000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000007000000	241.379
						anode body	0.012033000000	Substance	Polytetrafluoroethylene (PTFE)	9002-84- 0	0.000007000000	581.734



6. BOM Level Report on Master PFAS Scan Rule

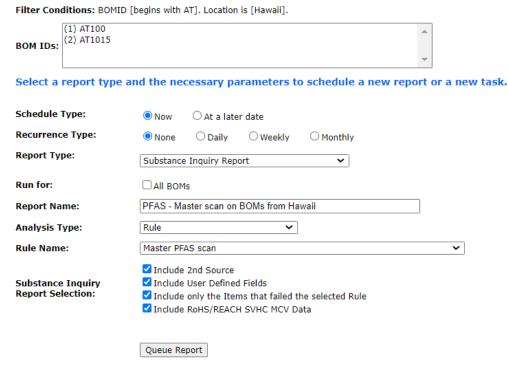
Generate the "Substance Inquiry" report with "Master PFAS scan" rule on your BOMs: click on "**Schedule Bulk reports**" from the BOM List page, as shown below.



- 6.1 You can perform the substance inquiry on substances listed in the Master PFAS scan rule and only display the parts that are used in the designated BOMs as shown in the example below. Do the following:
 - Go to the "Queue BOM Report" page.
 - Select "Substance Inquiry Report" from Report Type.
 - Enter Report Name based on your report name.
 - Select "Rule" from Analysis Type.
 - Select "Master PFAS scan" as the Rule Name
 - Check the appropriate selection from the options below:
 - Checking "Include 2nd source" will validate the Master PFAS scan rule not only on the primary parts in your BOMs, but also on the 2nd source parts.
 - Checking "include User Defined Fields" will show all selected User Defined Fields in the report, and checking "include only the Items that failed the selected Rule" will show only the parts failed the Master PFAS scan rule.
 - Checking "Include RoHS/REACH SVHC MCV data" will examine the PFAS (based on the substances listing from Master PFAS scan rule) on parts with FMD data and also on parts without FMD but with RoHS or REACH SVHC MCV data (for parts with only the compliance statements on RoHS/SVHC, GreenSoft data team would present the RoHS/SVHC data in MCV form, which is showing the Maximum Concentration Value.)



Queue BOM Report



- 6.2 You can click on "Queue Report", as shown above, to generate the report on the spot, or change the Schedule Type and Recurrence Type to generate the report at a later time with a fixed interval.
- 6.3 Once the report is generated, you can go to **Report** tab to see the Report Statistics and click on the number on the Substance Inquiry Report in BOM Related section to access the report, as shown below.



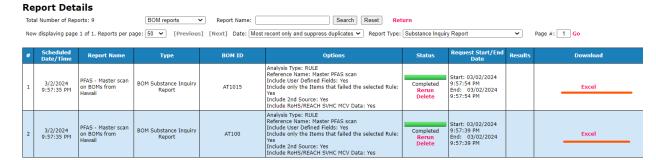
Report Statistics

Note - report count is computed by filtering the most recent only and suppressing

Display: All ✓ Report Name: Search Reset Genera

#	Item/BOM	Report Type	Report Count
1	Item Master related [128]	Conflict Minerals Report - Company	8
2		Extended Minerals Report - Company	1
3		Grand Report	37
4		Substance Analysis Report	48
5		Substance Inquiry Report	23
6		Substance Matrix Report	11
7	BOM related [457]	BOM Compliance Summary	29
8		BOM Second Source Processing	2
9		China RoHS Report	17
10		Compliance Report	102
11		Conflict Minerals Report - Product	9
12		Conflict Minerals Report - List of Products	1
13		Conflict Minerals Report - User Defined	1
14		Disclosure Report	65
15		EU RoHS MCV Report	31
16		UK RoHS MCV Report	0
17		Extended Minerals Report - Product	0
18		Extended Minerals Report - List of Products	0
19		Extended Minerals Report - User Defined	0
20		Family BOM Grand Report	2
21		Grand Report	56
22		REACH SVHC Report	41
23		Substance Analysis Report	49
24		Substance Inquiry Report	9
25		SCIP Dossier Report	43
26		SCIP SSN Report	0

6.4 Search the report based on the Report Name you have provided and click on "**Excel**" to download the report in Excel for each BOM, as shown below.



You can then open the downloaded Excel report, which will show you the list of parts that contain PFAS per the substances listed under the "Master PFAS scan" rule on the



designated BOM, and the info on the PFAS substance(s) with associated Subpart. The sample report is shown below:

Report Type:	BOM Substance	Inquiry Report										
Date of Report:	3/2/2024 9:57:	54 PM										
	AT1015											
	Wireless Router											
Revision:												
Notes:												
	590.000000000	000										
Additional Produc												
Dula Names	Markey DEAC	_										
	Master PFAS sca Article Level	n										
Rule Type: Category:	Article Level											
Exclusion Categor												
Dula Descriptions	Per- and Polyfluo		(PFAS), a class of orga ncluded in the OECD, EF									
Include 2nd Sour	Yes											
Internal PN	Manufacturer Name	Manufacturer PN	Description	Rule Status	Substance/Group Name	CAS Number	EC Number	MCV (ppm) Article Level	MCV (ppm) Homogeneous Level	Mass (g)	Present in Subparts	Source

7. BOM Level PFAS Report on TSCA 8(a)(7)

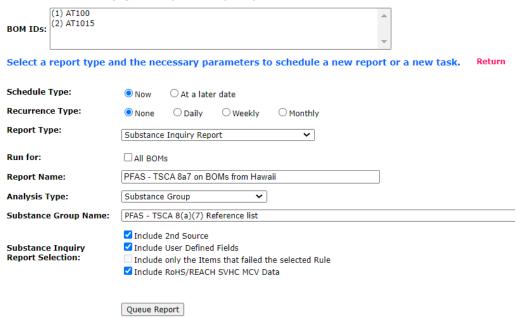
If you need to find out which parts from your BOMs contain PFAS substances associated with TSCA 8(a)(7) - PFAS, you can also leverage the Substance Inquiry report. **Please note** – regulation "TSCA 8(a)(7)" has many other requirements besides the disclosure of PFAS substances. GDM software will only cover the analysis of PFAS substances on your parts and BOMs. For other requirements on this regulation, please check the details of the regulation from your end.

- 7.1 From the "Queue BOM Report", you can set up the report by selecting the following:
 - Select "**Substance Inquiry Report**" from Report Type.
 - Enter Report Name based on your report name.
 - Select "Substance Group" from Analysis Type.
 - Select "PFAS TSCA 8(a)(7) Reference List" as Substance Group Name
 - Check the appropriate selection from the options below:
 - Checking "**Include 2**nd **source**" will validate the "PFAS TSCA 8(a)(7) Reference List" not only on the primary parts in your BOMs, but also on the 2nd source parts.
 - Checking "include User Defined Fields" will show all selected User Defined Fields
 in the report. This will gray out "Include only the Items that failed the selected
 Rule" since there will be no parts failed on any rule as the GDM software would
 only perform the analysis on the substance group level.
 - Checking "Include RoHS/REACH SVHC MCV data" which will examine the PFAS
 (based on the substances listing from TSCA 8(a)(7)) on parts with FMD data and
 also on parts without FMD but with RoHS or REACH SVHC MCV data (for parts
 with only the compliance statements on RoHS/SVHC, GreenSoft data team would



present the RoHS/SVHC data in MCV form, which is showing the Maximum Concentration Value).

Queue BOM Report Filter Conditions: BOMID [begins with AT]. Location is [Hawaii].



- 7.2 You can click on "**Queue Report**", as shown above, to generate the report on the spot, or change the Schedule Type and Recurrence Type to generate the report at a later time with a fixed interval.
- 7.3 Once the report is generated, you can go to "**Report**" tab to see the Report Statistics and click on the number on the Substance Inquiry Report in BOM Related section to access the report, as shown below.



Report Statistics

Note - report count is computed by filtering the most recent only and suppressing

Display: All

Report Name: Search Reset Genera

#	Item/BOM	Report Type	Report Count
1	Item Master related [128]	Conflict Minerals Report - Company	8
2		Extended Minerals Report - Company	1
3		Grand Report	37
4		Substance Analysis Report	48
5		Substance Inquiry Report	23
6		Substance Matrix Report	11
7	BOM related [457]	BOM Compliance Summary	29
8		BOM Second Source Processing	2
9		China RoHS Report	17
10		Compliance Report	102
11		Conflict Minerals Report - Product	9
12		Conflict Minerals Report - List of Products	1
13		Conflict Minerals Report - User Defined	1
14		Disclosure Report	65
15		EU RoHS MCV Report	31
16		UK RoHS MCV Report	0
17		Extended Minerals Report - Product	0
18		Extended Minerals Report - List of Products	0
19		Extended Minerals Report - User Defined	0
20		Family BOM Grand Report	2
21		Grand Report	56
22		REACH SVHC Report	41
23		Substance Analysis Report	49
24		Substance Inquiry Report	9
25		SCIP Dossier Report	43
26		SCIP SSN Report	0

7.4 Search the report based on the Report Name you have provided and click on "**Excel**" to download the report in Excel, as shown below.

Report Details





7.5 You can then open the downloaded Excel report, which will show you the list of parts that contain the PFAS per the "PFAS – TSCA 8(a)(7) Reference List" in the designated BOM, and the info on the PFAS substance(s) with the associated Subpart. The sample report is shown below.

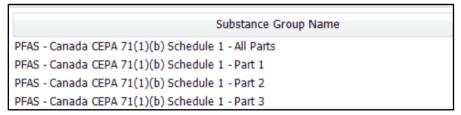
Report Type:	BOM Substance	Inquiry Report										
Date of Report	3/2/2024 11:22	:00 PM										
BOM ID:	AT1015											
BOM Name: Revision:	Wireless Router											
Notes: Mass (g):	590.000000000	000										
Additional Prod												
Substance Grou CAS Number: EC Number:	PFAS - TSCA 8(a)(7) Reference	list									
Include 2nd So	Yes											
Internal PN	Name	PN	Description	Substance/Group Name	CAS Number	EC Number	Component Level ppm	MCV (ppm) Article Level	MCV (ppm) Homogeneous Level	Mass (g)	Present in Subparts	Source
0022-10036-10	AVX	TAJA106K010R	CAP,3216,10 UF,10	Polytetrafluoroethylene (PTFE)	9002-84-0	618-337-2	241.379	581.734	581.734	0.0000070	anode body	FMD

8. BOM Level PFAS Report on Canada CEPA 71(1)(b) Schedule 1

To find out which parts from your BOMs contain PFAS substances associated with Canada CEPA 71(1)(b) Schedule 1 - PFAS, you can also leverage the Substance Inquiry report. **Please note** – the regulation "Canada CEPA 71(1)(b) Schedule 1" has many other requirements besides the disclosure of PFAS substances. GDM software will only cover the analysis of PFAS substances on your parts and BOMs. For information on other requirements outlined in this regulation, please refer to the full details of the regulation directly.

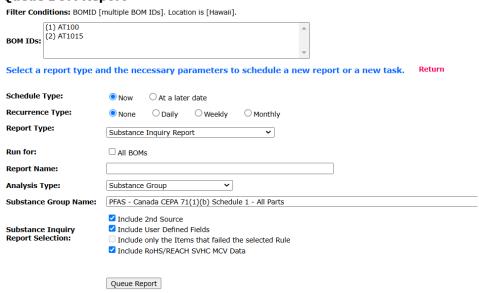
- 8.1 From the "Queue BOM Report", set up the report by selecting the following:
 - Select "Substance Inquiry Report" from Report Type.
 - Enter Report Name based on your report name.
 - Select "Substance Group" from Analysis Type.
 - Select "PFAS Canada CEPA 71(1)(b) Schedule 1 All Parts" as Substance Group
 Name. Please note: there are 3 different sets of PFAS substances (Part 1, Part 2 and
 Part 3) defined in CEPA 71(1)(b), depend upon the total weight and conditions of the
 imported PFAS substances. GreenSoft recommends to validate your BOMs against the
 aggregation of the PFAS substances from these 3 parts as "PFAS Canada CEPA
 71(1)(b) Schedule 1 All Parts".





- Check the appropriate selection from the options below:
 - Checking "Include 2nd source" will validate the "PFAS Canada CEPA 71(1)(b)
 Schedule 1 All Parts" not only on the primary parts in your BOMs, but also on the 2nd source parts.
 - Checking "include User Defined Fields" will show all selected User Defined Fields
 in the report. This will gray out "Include only the Items that failed the selected
 Rule" since there will be no parts failed on any rule, as the GDM software will only
 perform the analysis on the substance group level.
 - Checking "Include RoHS/REACH SVHC MCV data" which will examine the PFAS (based on the substances listing from PFAS Canada CEPA 71(1)(b) Schedule 1 All Parts) on parts with FMD data and also on parts without FMD but with RoHS or REACH SVHC MCV data. (For parts with only the compliance statements on RoHS/SVHC, the GreenSoft data team will present the RoHS/SVHC data in MCV form, which is showing the Maximum Concentration Value).

Queue BOM Report

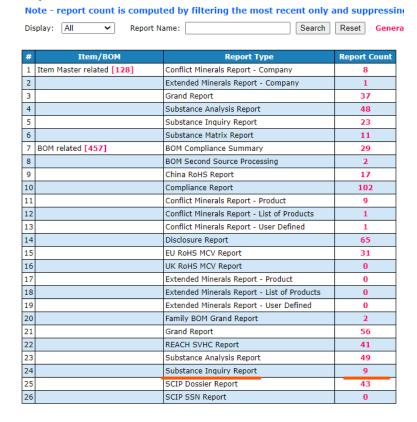


8.2 Click on "Queue Report", as shown above, to generate the report on the spot, or change the Schedule Type and Recurrence Type to generate the report at a later time with a fixed interval.

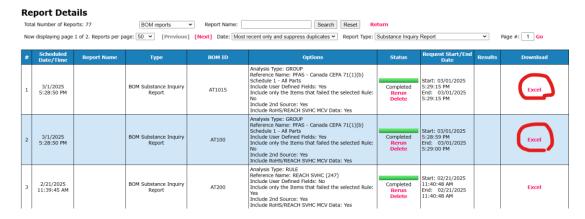


8.3 Once the report is generated, navigate to the "**Report**" tab to see the Report Statistics and click on the number in the Substance Inquiry Report in BOM Related section to access the report, as shown below.

Report Statistics



8.4 Search the report that you have created for identifying the PFAS substances on your BOMs per the substance group of "PFAS – Canada CEPA 71(1)(b) Schedule 1 – All Parts" and click on "Excel" to download the report in Excel, as shown below.





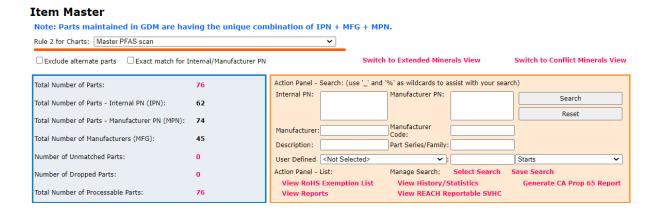
8.5 You can then open the downloaded Excel report, which will show you the list of parts that contain the PFAS per "**PFAS – Canada CEPA 71(1)(b) Schedule 1 – All Parts**" in the designated BOM, and the info on the PFAS substance(s) with the associated Subpart. The sample report is shown below.

Report Type:	BOM Substance Inquiry	Report										
Date of Report:	3/1/2025 5:29:15 PM	-										
BOM ID:	AT1015											
BOM Name: Mass (g):	Wireless Router 590.000000000000											
	p PFAS - Canada CEPA 71	၂ ((1)(b) Schedule 1 -	All Parts									
CAS Number: EC Number:												
Include 2nd Sou												
Theilide Zha Sou	ır Yes]										
Internal PN	Manufacturer Name	Manufacturer PN	Description	Substance/Group Name	CAS Number	EC Number	Component Level ppm	MCV (ppm) Article Level	MCV (ppm) Homogeneous Level	Mass (g)	Present in Subparts	Source
Internal PN		TAJA106K010R	CAP,3216,10 UF,10%,	Polytetrafluoroethylene (PTFE)			Level ppm	MCV (ppm) Article Level	Homogeneous Level		Subparts	Source
	Manufacturer Name	TAJA106K010R 3296Z-Y91-104LF	CAP,3216,10 UF,10%, Inductor, 1024, 2C6, 1		9002-84-0 9002-84-0	Number 618-337-2 618-337-2	217.241	374.755 80000.000	Homogeneous Level 374.755 80000.000		Subparts ANODE BODY Lubricant-Lubri	FMD FMD

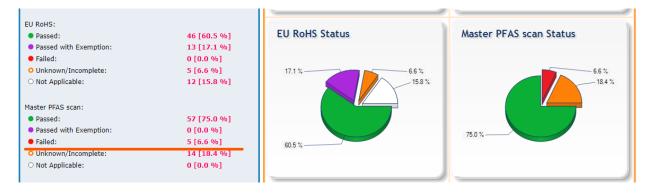
C – Generate Aggregated TSCA 8(a)(7) PFAS Reports on BOMs

9. View TSCA 8(a)(7) PFAS Compliance Data

If GreenSoft is performing the collection of TSCA 8(a)(7) PFAS compliance data for you, you can view the PFAS data from the Item Master first by using the "**Rule 2 for Charts**" with "**Master PFAS Scan**" rule from the Item Master page – as shown below.



9.1 View the pie-chart for Rule 2 to see the number of parts failing on the "Master PFAS Scan" rule. Click on the Red pie-chart or check on the number of "Failed" for "Master PFAS Scan" rule; it should display the list of parts – as shown below.

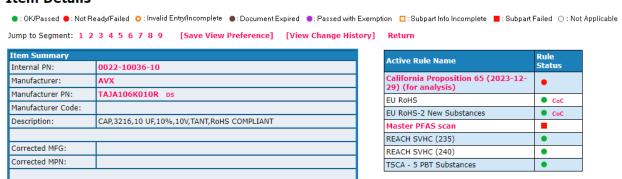




#	Internal PN	Manufacturer	Manufacturer PN	Description	Requirement Status	MCD Type	MCV Version
1	0022-10036-10	AVX	TAJA106K010R	CAP,3216,10 UF,10%,10V,TANT,RoHS COMPLIANT	Passed	Full Disclosure FMD	
2	BATG-BR1632R81- B	RAYOVAC	BR1632R81-B	BAT,BR1632R81- B,SRFCMNT,16X3.2mm,3.3V,RO	Passed	Full Disclosure	
3	BATG-BR1632R81- B	RAYOVAC	BR1632R81-BA	BAT,BR1632R81- B,SRFCMNT,16X3.2mm,3.3V,RO	Passed	Full Disclosure	
4	BATG-BR2335SM-B	RAYOVAC	BR2335SM-B	BAT,BR2335SM- B,300MAh,3V,SMT,ROHS	Passed	Full Disclosure	
5	BATG-BR2335SM-B	RAYOVAC	BR2335SM-BA	BAT,BR2335SM- B,300MAh,3V,SMT,ROHS	Passed	Full Disclosure	

9.2 Click on the Internal PN for any part in the list, and it will show you the details of the part with the compliance information, as shown below. In our example, you can see the details of "0022-10036-10" with Manufacturer of "AVX" and Manufacturer PN of "TAJA106K010R". If you scroll down to the FMD table, you should see the Function Category code on the PFAS substance inside the FMD table – listed on the column of "Purpose". In our example, this AVX part contains "PTFE" in the material of "anode body" with Functional Category code of "F090" – as shown below.

Item Details

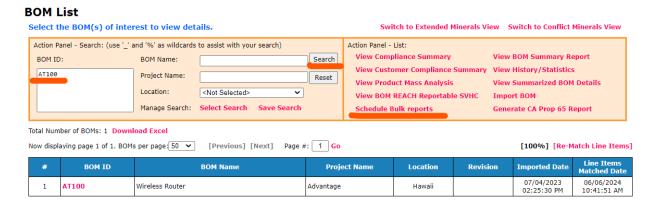


"" indicates the column contains computed values Substance Information at Homogeneous Level										
Subpart Name	Mass (mg)	Subpart Type	Material Class	Exemptions	Substance Name	CAS Number	Mass (mg)	*ppm to Subpart	*ppm to Component	Purpose
anode body	12.033000000000	Article	Ceramics / Glass [M-010]		Ditantalum pentaoxide	1314-61-0	9.448000000000	785174.105	325793.103	
					Graphite	7782-42-5	0.042000000000	3490.401	1448.276	
					Manganese dioxide	1313-13-9	1.786000000000	148425.164	61586.207	
					Polydimethylsiloxane (PDMS)	63148-62-9	0.002000000000	166.210	68.966	
					Polytetrafluoroethylene (PTFE)	9002-84-0	0.007000000000	581.734	241.379	F090
					Tantalum	7440-25-7	0.748000000000	62162.387	25793.103	
moulding mass	11.686000000000	Article	Other Plastics and Rubber [M-014]		Cresol Novolac Epoxy	29690-82-2	3.506000000000	300017.114	120896.552	
					Silica, vitreous	60676-86-0	8.180000000000	699982.886	282068.966	
silver layer	0.561000000000	Article	Precious metals [M-008]		reaction product: bisphenol-A- (epichlorhydrin); epoxy resin	25068-38-6	0.029000000000	51693.405	1000.000	
					Silver	7440-22-4	0.532000000000	948306.595	18344.828	
silver paste	0.098000000000	Article	Precious metals [M-008]		2-Propenenitrile, polymer with 1,3- butadiene, carboxy-terminated, reaction products with epichlorohydrin-2,2'- methylenebis[phenol] polymer	68610-73-1	0.013000000000	132653.061	448.276	
					Silver	7440-22-4	0.085000000000	867346.939	2931.034	



10. Generate the TSCA 8(a)(7) PFAS report for your BOM

10.1 To generate the TSCA 8(a)(7) PFAS report for your BOM or BOMs, first select the BOM(s) from the BOM List, and click on "**Schedule Bulk reports**" – as shown below



10.2 From the "Queue BOM Report" page, select the Report Type of "TSCA 8(a)(7) PFAS Report", and set up other options per your preference – as shown below.



10.3 Once the report is generated, you can access such by visiting the "**Reports**" tab from the top and clicking on the number for the BOM level "**TSCA 8(a)(7) PFAS Report**", and you should see the "**Report Details**" page – as shown below.





10.4 Click on the "**Excel**" to open the report in Excel, and you should see the first sheet of "Product TSCA 8(a)(7) PFAS Report" has the PFAS substance(s) with the associated Functional Category codes – as shown below.

F000 (Unknown)	Polytetrafluoroethylene (PTFE)	9002-84-0	618-337-2	0.003190900000	5.408305085
Functional Code (Description)	Substance Name	CAS Number	EC Number	Aggregated mass (g)	Aggregated ppm
BOM ID: BOM Name: Mass (g):	AT100 Wireless Router 590.000000000000				
Date of Report:	3/1/2025 9:17:25 PM				
Report Type:	Product TSCA 8(a)(7) PFAS Report	-			

10.5 Click on the "**Primary Part Details**" sheet in the same Excel file, and the report will show the details of the failed PFAS and the associated part number, TSCA 8(a)(7) Category code, and other information, as shown below. You can distribute this report to your customer for a complete declaration of TSCA 8(a)(7) PFAS on your products.

