GDM QUICK REFERENCE GUIDE:
GENERATING COMPLIANCE ANALYSIS REPORTS FOR PFAS

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 8a7 PFAS Substances List
(4) IEC 62474 PFAS Substances List
(5) other PFAS substances identified by GreenSoft.

Rule Details

Name: Master PFAS scan

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.

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) PFAS – EPA – PFAS chemicals with explicit structures (PFASSTRUCT),
(2) PFAS – EPA – PFAS chemicals without explicit structures (PFASDEV)

(3) PFAS – IEC 62474

(4) PFAS – OECD – Comprehensive Global Database of PFASs

(5) PFAS – Other Sources

(6) 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 (2) how to identify the PFAS substances from your BOMs and generate PFAS reports, and (3) if GreenSoft is doing the data collection on TSCA 8a7 PFAS for you with the functional category codes on identified PFAS substances, then this document will also show you how to generate the aggregated TSCA 8a7 PFAS report on your BOMs.

A - Identify PFAS from All Parts in the Item Master:

To identify any PFAS substance in your parts, 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**. All these methods are explained below.

1. 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.

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 FMD	
3	BATG-BR1632R81-B	RAYOVAC	BR1632R81-BA	BAT,BR1632R81-B,SRFCMNT,16X3.2mm,3.3V,RO	Passed	Full Disclosure FMD	
4	BATG-BR2335SM-B	RAYOVAC	BR2335SM-B	BAT,BR2335SM-B,300MAh,3V,SMT,ROHS	Passed	Full Disclosure FMD	
5	BATG-BR2335SM-B	RAYOVAC	BR2335SM-BA	BAT,BR2335SM-B,300MAh,3V,SMT,ROHS	Passed	Full Disclosure FMD	

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.

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 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.   **Return**

Rule Substance Name	Type	Threshold	Units	Notes	Article (MCV)	Article Name	Article Mass (g)	Type	Substance Name	CAS Number	Applicable Weight (g)	Article (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

1.6   You can also find out the BOMs that have used this part containing a PFAS substance by 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.

Where 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.   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**

Total Number of Parts:	76
Total Number of Parts - Internal PN (IPN):	62
Total Number of Parts - Manufacturer PN (MPN):	74
Total Number of Manufacturers (MFG):	45
Number of Unmatched Parts:	0
Number of Dropped Parts:	0
Total Number of Processable Parts:	76

Action Panel - Search: (use '_' and '%' as wildcards to assist with your search)

Internal PN: [   ]   Manufacturer PN: [   ]   [Search]   [Reset]

Manufacturer: [   ]   Manufacturer Code: [   ]

Description: [   ]   Part Series/Family: [   ]

User Defined: <Not Selected> : [   ]   Starts

Action Panel - List: Manage Search: **Select Search**   **Save Search**

View RoHS Exemption List   **View History/Statistics**   **Generate CA Prop 65 Report**

View Reports   **View REACH Reportable SVHC**

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.   **Queue new report**   **Return**

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 "**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

Select a report type and the necessary parameters to schedule a new report or a new task. **Return**

Schedule Type:	⦿ Now ◯ At a later date
Recurrence Type:	⦿ None ◯ Daily ◯ Weekly ◯ Monthly
Report Type:	Substance Inquiry Report ▼
Report Name:	PFAS analysis report for parts used in Pasadena
Analysis Type:	Rule ▼
Rule Name:	Master PFAS scan ▼
Substance Inquiry Report Selection:	☑ Include User Defined Fields ☑ Include only the Items that failed the selected Rule ☑ Include BOM Where Used ☑ Include 2nd Source BOM Location: Pasadena ▼ ☑ Include RoHS/REACH SVHC MCV Data

This might take a long time and consume a lot of resources. Be sure that you really need this type of rep

Queue 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.

GreenData Manager BROWSER EDITION

System	Manufacturers	Active Rules	Notifications	Item Master	Bill of Materials	SCIP Management	Reports	Tasks

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.

Report Details

Total Number of Reports: 22 | Item Master reports ▼ | Report Name: [_____] | Search | Reset | **Return**

Now displaying page 1 of 1. Reports per page: 50 ▼ | [Previous] [Next] Date: Most recent only and suppress duplicates ▼ | Report Type: Substance Inquiry Report ▼ | Page #: 1 | Go

#	Scheduled Date/Time	Report Name	Type	Options	Status	Request Start/End Date	Results	Download
1	3/1/2024 9:29:04 AM	PFAS analysis report for parts used in Pasadena	Item Master Substance Inquiry Report	Analysis Type: RULE Reference Name: Master PFAS scan Include User Defined Fields: Yes Include only the Items that failed the selected Rule: Yes Include BOM Where Used: Yes Include 2nd Source: Yes BOM Location: Pasadena Include RoHS/REACH SVHC MCV Data: Yes	Completed **Rerun Delete**	Start: 03/01/2024 9:29:18 AM End: 03/01/2024 9:29:18 AM		Excel
2	2/27/2024 1:57:58 PM		Item Master Substance Inquiry Report	Analysis Type: RULE Reference Name: Master PFAS scan Include User Defined Fields: No Include only the Items that failed the selected Rule: Yes Include BOM Where Used: Yes Include 2nd Source: Yes BOM Location: Pasadena Include RoHS/REACH SVHC MCV Data: Yes	Completed **Rerun Delete**	Start: 02/27/2024 1:58:12 PM End: 02/27/2024 1:58:12 PM		Excel

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.

Report Type:	Item Master Substance Inquiry Report
Date of Report:	3/1/2024 9:29:18 AM
Rule Name:	Master PFAS scan
Rule Type:	Article Level
Category:	
Exclusion Categ	
Rule Descriptio	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.

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	Used In BOMs	Source	PKG: Recy conten
0022-10036-10	AVX	TAJA106K010R	CAP,3216,10 UF,10%,10V,T	Failed	Polytetrafluoro	9002-84-0	618-337-2	581.734	581.734	0.000007000000	anode body	C15-1 | C22-Simple SuperBOM | TEST_AT200 | TEST_AT300	FMD	
BATG-BR1632R8	RAYOVAC	BR1632R81-B	BAT,BR1632R81-B,SRFCMN	Failed	Ethene, 1,1-di	24937-79-9	607-458-6	12500.000	12500.000	0.020000000000			FMD	
BATG-BR1632R8	RAYOVAC	BR1632R81-BA	BAT,BR1632R81-B,SRFCMN	Failed	Ethene, 1,1-di	24937-79-9	607-458-6	12500.000	12500.000	0.020000000000			FMD	
BATG-BR2335SN	RAYOVAC	BR2335SM-B	BAT,BR2335SM-B,300MAh,	Failed	Ethene, 1,1-di	24937-79-9	607-458-6	12500.000	12500.000	0.042500000000			FMD	
BATG-BR2335SN	RAYOVAC	BR2335SM-BA	BAT,BR2335SM-B,300MAh,	Failed	Ethene, 1,1-di	24937-79-9	607-458-6	12500.000	12500.000	0.042500000000			FMD	

3.   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
- 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.)

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.
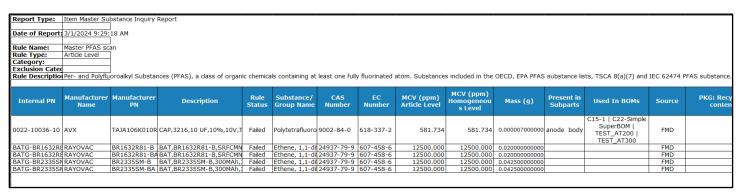
GreenData Manager BROWSER EDITION

| System | Manufacturers | Active Rules | Notifications | Item Master | Bill of Materials | SCIP Management | Reports | Tasks |

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

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.

B - Identify PFAS from Your BOMs

To identify any PFAS substance in your products, there are few ways you can do this inside GDM - (4) you can set up one of the displayed rules as the "Master PFAS scan" rule, or (5) you can use the **Substance Inquiry** report on "Master PFAS rule" or (6) 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**. 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.

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

4.1   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.

4.2   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.)

4.3　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.

4.4　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.

4.5   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.

4.6   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.   Return

Rule Substance Name	Type	Threshold	Units	Notes	Article (MCV)	Article Name	Article Mass (g)	Type	Substance Name	CAS Number	Applicable Weight (g)	Article (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

5   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.

BOM List
Select the BOM(s) of interest to view details.   Switch to Extended Minerals View   Switch to Conflict Minerals View

Action Panel - Search: (use '_' and '%' as wildcards to assist with your search)   **Action Panel - List:**

BOM ID:	BOM Name:	[Search]	View Compliance Summary	View BOM Summary Report
AT	Project Name:	[Reset]	View Customer Compliance Summary	View History/Statistics
	Location: Hawaii		View Product Mass Analysis	View Summarized BOM Details
	Manage Search: Select Search Save Search		View BOM REACH Reportable SVHC	Import BOM
			Schedule Bulk reports	Generate CA Prop 65 Report

Total Number of BOMs: 2 Download Excel

Now displaying page 1 of 1. BOMs per page: 50 ▾   [Previous] [Next]   Page #: 1 Go   [100%] [Re-Match Line Items]

#	BOM ID	BOM Name	Project Name	Location	Revision	Imported Date	Line Items Matched Date
1	AT100	Wireless Router	Advantage	Hawaii		07/04/2023 02:25:30 PM	03/02/2024 12:01:30 AM
2	AT1015	Wireless Router	Advantage	Hawaii		08/24/2023 01:36:01 PM	03/02/2024 12:01:30 AM

5.1 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
- 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.)

5.2 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.

5.3 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

5.4 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.

Report Details

Total Number of Reports: 9   [BOM reports ▼]   Report Name: [_____] [Search] [Reset]   **Return**

Now displaying page 1 of 1. Reports per page: [50 ▼]   [Previous] [Next]   Date: [Most recent only and suppress duplicates ▼]   Report Type: [Substance Inquiry Report ▼]   Page #: [1]   Go

#	Scheduled Date/Time	Report Name	Type	BOM ID	Options	Status	Request Start/End Date	Results	Download
1	3/2/2024 9:57:35 PM	PFAS - Master scan on BOMs from Hawaii	BOM Substance Inquiry Report	AT1015	Analysis Type: RULE Reference Name: Master PFAS scan Include User Defined Fields: Yes Include only the Items that failed the selected Rule: Yes Include 2nd Source: Yes Include RoHS/REACH SVHC MCV Data: Yes	Completed Rerun Delete	Start: 03/02/2024 9:57:54 PM End: 03/02/2024 9:57:54 PM		Excel
2	3/2/2024 9:57:35 PM	PFAS - Master scan on BOMs from Hawaii	BOM Substance Inquiry Report	AT100	Analysis Type: RULE Reference Name: Master PFAS scan Include User Defined Fields: Yes Include only the Items that failed the selected Rule: Yes Include 2nd Source: Yes Include RoHS/REACH SVHC MCV Data: Yes	Completed Rerun Delete	Start: 03/02/2024 9:57:39 PM End: 03/02/2024 9:57:39 PM		Excel

5.5   You can then open the downloaded Excel report, which will show you the list of parts that contain PFAS per the substances lis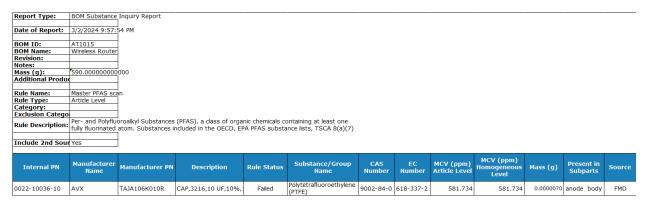ted under the "**Master PFAS scan**" rule on the designated BOM, and the info on the PFAS substance(s) with associated Subpart. The sample report is shown below:
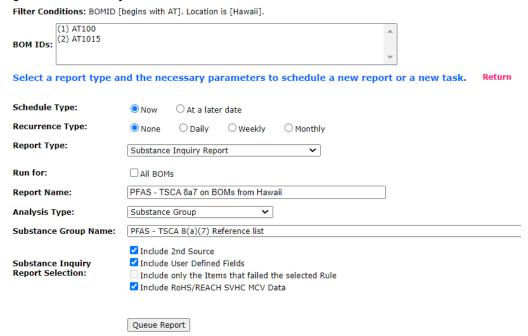
Report Type:	BOM Substance Inquiry Report
Date of Report:	3/2/2024 9:57:54 PM
BOM ID:	AT1015
BOM Name:	Wireless Router
Revision:	
Notes:	
Mass (g):	590.000000000000
Additional Produc	
Rule Name:	Master PFAS scan
Rule Type:	Article Level
Category:	
Exclusion Catego	
Rule Description:	Per- and Polyfluoroalkyl 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)
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
0022-10036-10	AVX	TAJA106K010R	CAP,3216,10 UF,10%,:	Failed	Polytetrafluoroethylene (PTFE)	9002-84-0	618-337-2	581.734	581.734	0.0000070	anode body	FMD

6.   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.

6.1   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
- Checking "**Include 2nd 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].

BOM IDs:
```
(1) AT100
(2) AT1015
```

Select a report type and the necessary parameters to schedule a new report or a new task.   Return

Schedule Type:	● Now ○ At a later date
Recurrence Type:	● None ○ Daily ○ Weekly ○ Monthly
Report Type:	Substance Inquiry Report ⌄
Run for:	☐ All BOMs
Report Name:	PFAS - TSCA 8a7 on BOMs from Hawaii
Analysis Type:	Substance Group ⌄
Substance Group Name:	PFAS - TSCA 8(a)(7) Reference list
Substance Inquiry Report Selection:	☑ Include 2nd Source ☑ Include User Defined Fields ☐ Include only the Items that failed the selected Rule ☑ Include RoHS/REACH SVHC MCV Data

Queue 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, as shown below.

Report Details

Total Number of Reports: 11 [BOM reports ▾] Report Name: [_____] [Search] [Reset] **Return**

Now displaying page 1 of 1. Reports per page: [50 ▾] [Previous] [Next] Date: [Most recent only and suppress duplicates ▾] Report Type: [Substance Inquiry Report ▾] Page #: [1] Go

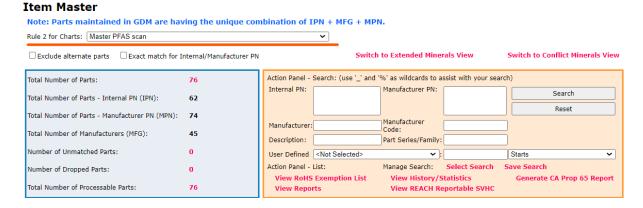| #	Scheduled Date/Time	Report Name	Type	BOM ID	Options	Status	Request Start/End Date	Results	Download
1	3/2/2024 11:21:33 PM	PFAS - TSCA 8a7 on BOMs from Hawaii	BOM Substance Inquiry Report	AT1015	Analysis Type: GROUP Reference Name: PFAS - TSCA 8(a)(7) Reference list Include User Defined Fields: Yes Include only the Items that failed the selected Rule: No Include 2nd Source: Yes Include RoHS/REACH SVHC MCV Data: Yes	Completed Rerun Delete	Start: 03/02/2024 11:22:00 PM End: 03/02/2024 11:22:00 PM		Excel
2	3/2/2024 11:21:33 PM	PFAS - TSCA 8a7 on BOMs from Hawaii	BOM Substance Inquiry Report	AT100	Analysis Type: GROUP Reference Name: PFAS - TSCA 8(a)(7) Reference list Include User Defined Fields: Yes Include only the Items that failed the selected Rule: No Include 2nd Source: Yes Include RoHS/REACH SVHC MCV Data: Yes	Completed Rerun Delete	Start: 03/02/2024 11:21:45 PM End: 03/02/2024 11:21:45 PM		Excel

6.5 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:	Wireless Router
Revision:	
Notes:	
Mass (g):	590.000000000000
Additional Prod	
Substance Grou	PFAS - TSCA 8(a)(7) Reference list
CAS Number:	
EC Number:	
Include 2nd So	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
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

C – Generate Aggregated TSCA 8a7 PFAS Reports on BOMs

1. If GreenSoft is doing the data collection of TSCA 8a7 PFAS compliance data for you, you can check on 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.

- When you review the pie-chart for Rule 2, you should see the number of parts failing on the "**Master PFAS Scan**" rule. Click on the Red pie or check on the number of "**Failed**" for "**Master PFAS Scan**" rule, and it will 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 FMD	
3	BATG-BR1632R81-B	RAYOVAC	BR1632R81-BA	BAT,BR1632R81-B,SRFCMNT,16X3.2mm,3.3V,RO	Passed	Full Disclosure FMD	
4	BATG-BR2335SM-B	RAYOVAC	BR2335SM-B	BAT,BR2335SM-B,300MAh,3V,SMT,ROHS	Passed	Full Disclosure FMD	
5	BATG-BR2335SM-B	RAYOVAC	BR2335SM-BA	BAT,BR2335SM-B,300MAh,3V,SMT,ROHS	Passed	Full Disclosure FMD	

- 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 will 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.
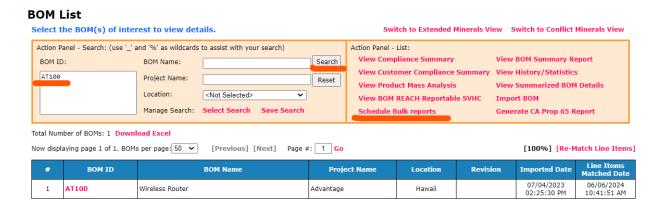
Item Details

● : OK/Passed ● : Not Ready/Failed ○ : Invalid Entry/Incomplete ● : Document Expired ● : Passed with Exemption □ : Subpart Info Incomplete ■ : Subpart Failed ○ : Not Applicable

Jump to Segment: 1 2 3 4 5 6 7 8 9   [Save View Preference]   [View Change History]   Return

Item Summary	
Internal PN:	0022-10036-10
Manufacturer:	AVX
Manufacturer PN:	TAJA106K010R DS
Manufacturer Code:	
Description:	CAP,3216,10 UF,10%,10V,TANT,RoHS COMPLIANT
Corrected MFG:	
Corrected MPN:	

Active Rule Name	Rule Status
California Proposition 65 (2023-12-29) (for analysis)	●
EU RoHS	● CoC
EU RoHS-2 New Substances	● CoC
Master PFAS scan	■
REACH SVHC (235)	●
REACH SVHC (240)	●
TSCA - 5 PBT Substances	●

"*" indicates the column contains computed values

Substance Information at Homogeneous Level

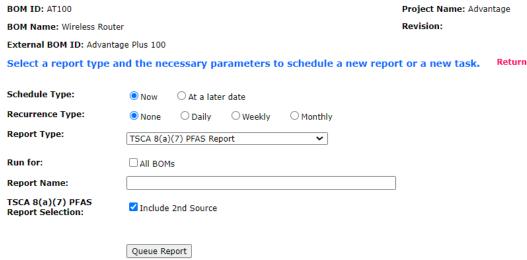| Subpart Name	Mass (mg)	Subpart Type	Material Class	Exemptions	Substance Name	CAS Number	Mass (mg)	*ppm to Subpart	*ppm to Component	Purpose
anode body	12.033000000000	Article	Ceramics / Glass [M-010]		Ditantalum pentaoxide	1314-61-0	9.448000000000	785174.105	325793.103	
					Graphite	7782-42-5	0.042000000000	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	

2. To generate the TSCA 8a7 PFAS report for your BOM or BOMs, first select the BOM(s) from the BOM List, and then click on "**Schedule Bulk reports**" – as shown below

BOM List

Select the BOM(s) of interest to view details.

Switch to Extended Minerals View   Switch to Conflict Minerals View

Action Panel - Search: (use '_' and '%' as wildcards to assist with your search)

BOM ID:	BOM Name:		Search
AT100	Project Name:		Reset
	Location:	\<Not Selected\>	
	Manage Search:	Select Search Save Search	

Action Panel - List:

View Compliance Summary   View BOM Summary Report
View Customer Compliance Summary   View History/Statistics
View Product Mass Analysis   View Summarized BOM Details
View BOM REACH Reportable SVHC   Import BOM
Schedule Bulk reports   Generate CA Prop 65 Report

Total Number of BOMs: 1 Download Excel

Now displaying page 1 of 1. BOMs per page: 50   [Previous] [Next]   Page #: 1 Go   [100%] [Re-Match Line Items]

#	BOM ID	BOM Name	Project Name	Location	Revision	Imported Date	Line Items Matched Date
1	AT100	Wireless Router	Advantage	Hawaii		07/04/2023 02:25:30 PM	06/06/2024 10:41:51 AM

- 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.

Queue BOM Report

BOM ID: AT100   **Project Name:** Advantage

BOM Name: Wireless Router   **Revision:**

External BOM ID: Advantage Plus 100

Select a report type and the necessary parameters to schedule a new report or a new task.   **Return**

Schedule Type:	● Now ○ At a later date	
Recurrence Type:	● None ○ Daily ○ Weekly ○ Monthly	
Report Type:	TSCA 8(a)(7) PFAS Report ⌄	
Run for:	☐ All BOMs	
Report Name:		
TSCA 8(a)(7) PFAS Report Selection:	☑ Include 2nd Source	

[Queue Report]

- 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.

Report Details

Total Number of Reports: 8   BOM reports ⌄   Report Name: [   ] Search Reset   **Return**

Now displaying page 1 of 1. Reports per page: 50 ⌄   [Previous] [Next] Date: Most recent only and suppress duplicates ⌄   Report Type: TSCA 8(a)(7) PFAS Report ⌄   Page #: 1 Go

#	Scheduled Date/Time	Report Name	Type	BOM ID	Options	Status	Request Start/End Date	Results	Download
1	6/5/2024 6:11:51 AM		TSCA 8(a)(7) PFAS Report	AT100	Include 2nd Source: Yes	Completed Rerun Delete	Start: 06/05/2024 6:11:59 AM End: 06/05/2024 6:11:59 AM		Excel

- Click on the "**Excel**" to open the report in Excel, and you will see the summary of the PFAS substances contained in the designated BOM(s) with the associated Functional Category codes – as shown below.

Report Type:	TSCA 8(a)(7) PFAS Report
Date of Report:	6/5/2024 6:11:59 AM
BOM ID:	AT100
BOM Name:	Wireless Router
Revision:	
Notes:	
Mass (g):	590.000000000000
Additional Products Cov	
Include 2nd Source:	Yes

Functional Code (Description)	Substance Name	CAS Number	EC Number	MCV (ppm) Homogeneous Level
F041 (Lubricating agent)	Polytetrafluoroethylene (PTFE)	9002-84-0	618-337-2	60000.000
F090 (Anti-stain agent)	Polytetrafluoroethylene (PTFE)	9002-84-0	618-337-2	80000.000

- Click on the "**TSCA 8(a)(7) PFAS Details**" sheet in the same Excel, the report will show the details of the failed PFAS and the associated part number and other information, as shown below. You can distribute this report to your customer for a complete declaration of TSCA 8a7 PFAS on your products.

Report Type:	TSCA 8(a)(7) PFAS Details
Date of Report:	6/5/2024 6:11:59 AM
BOM ID:	AT100
BOM Name:	Wireless Router
Revision:	
Notes:	
Mass (g):	590.000000000000
Additional Products Covered:	
Include 2nd Source:	Yes

Functional Code (Description)	Internal PN	Manufacturer Name	Manufacturer PN	Description	Substance Name	CAS Number	EC Number	Subpart Level ppm	Mass (g)	Present in Subpart
F041 (Lubricating agent)	101-231-1111	BOURNS	3296Z-Y91-104LF	Inductor, 1024, 2C6, 1%	Polytetrafluoroethylene (PTFE)	9002-84-0	618-337-2	60000.000	0.000006000000	Lubricant-Lubricant
F090 (Anti-stain agent)	0022-10036-10	AVX	TAJA106K010R	CAP,3216,10 UF,10%,10	Polytetrafluoroethylene (PTFE)	9002-84-0	618-337-2	581.734	0.000007000000	anode_body
F090 (Anti-stain agent)	101-231-1111	BOURNS	3296Z-Y91-104LF	Inductor, 1024, 2C6, 1%	Polytetrafluoroethylene (PTFE)	9002-84-0	618-337-2	80000.000	0.003040000000	Rotor-Nylon