

Explanation for entry of
chemSHERPA CI/AI
(to be submitted to Citizen Electronics)
Ver. 1

October 3, 2017
Quality Management Division
Citizen Electronics Co., Ltd.

1. Submit chemSHERPA CI/AI (material composition list)

[Data entry support tool (Japanese/English/Chinese)]

Please **make sure to download** and use **the latest version** of the data entry support tool provided at the following website.

■ Website: <https://chemsherpa.net/chemSHERPA/tool/>

■ Contents: 1) Set of files of data entry support tool for chemicals and manuals

2) Set of files of data entry support tool for articles and manuals

■ Notes:

- As reporting of chemSHERPA declarable substances only will not meet our customer's requirements, please **make sure** to report composition by checking **the content rate** adds up to **100%** in total including optional reporting substances (those other than chemSHERPA declarable substances) for each product or component.

- When a resurvey is needed due to a change in regulations etc., we ask you to conduct the resurvey accordingly.

- Please send an **approved SHCI/SHAI file** for submission.

- Please **make sure to correct any errors** in entered data before submission.

- If you have any questions, please get in touch with our company or see the website below.

chemSHERPA scheme: <https://chemsherpa.net/>

chemSHERPA Data entry support tool for chemicals/articles, Data entry manual

chemSHERPA Data entry support tool for chemicals/articles, Operation manual

2. chemSHERPA CI/AI rules

[General]

- Choose 'mg' for the unit of mass and 'piece' for the reporting unit.

[Composition]

- Enter information of impurity when its content is known, even if the content is below the threshold of laws and regulations and it is not added intentionally.

- For optional reporting substances (those other than chemSHERPA declarable substances), enter substance names (in English) and CAS numbers directly and check boxes in the 'Optional reporting' section.

- Disclose 100% of substances including optional reporting substances in as much detail as possible.

- Make sure that the mass of product is equal to the total mass of materials ((mass x quantity) + (mass x quantity) + ...).

- Only when a CAS number of an optional reporting substance is unknown, enter a G-CAS number of the substance listed in the 'G-CAS No. table' provided by Citizen Electronics.

- Enter a '-' (one-byte hyphen) in 'CAS Number,' if a CAS number cannot be disclosed.

- Enter a manufacturer name/manufacturer's model number in "Remarks" in the 'Material' section.

- Enter purpose of use in "Remarks" in the 'Substance' section.

3. G-CAS No. (Generic CAS number) table

G-CAS	Substance Name (Polymers)	G-CAS	Substance Name (Polymers)
G-001	ABS/PC	G-023	Polyethylene terephthalate(PET)
G-002	Acrylic resin	G-024	Polyimide(PI)
G-003	Acrylonitrile-butadiene-styrene rubber(ABS)	G-025	Polyisocyanates
G-004	Amine resin	G-026	Polymethylene methacrylate(PMMA)
G-005	Biphenyl resin	G-027	Polyol
G-006	Cyclo-olefin resin	G-028	Polyolefin
G-007	Epoxy resin(EP)	G-029	Polyoxymethylene(POM)
G-008	Liquid crystal polymer(LCP)	G-031	Polyphenylene sulfide(PPS)
G-009	Nitrile butadiene rubber(NBR)	G-032	Polyphthalamide(PPA)
G-010	Phenol resin	G-033	Polypropylene(PP)
G-011	Phenol-formaldehyde resin	G-034	Polystyrene (PS)
G-012	Polyamide resin(PA)	G-035	Polytetrafluoroethylene(PTFE)
G-013	Polyamideimide	G-036	Polyurethane(PUR)
G-014	Polybenzoxazole	G-037	Polyurethane acrylate
G-015	Polybutadiene	G-038	Polyvinylchloride(PVC)
G-016	Polybutylene terephthalate(PBT)	G-039	Rubber
G-017	Polycarbonate(PC)	G-040	Silicone
G-018	Polyester resin	G-041	Styrene-acrylonitrile plastic(SAN)
G-019	Polyethers	G-042	Thermoplastic elastomer(TPE)
G-020	Polyethersulfone(PES)	G-043	Triacetyl cellulose(TAC)
G-021	Polyethylene(PE)	G-044	Thermoplastic polyurethane(TPU)
G-022	Polyethylene naphthalene(PEN)		

G-CAS	Substance Name (Additives)
G-045	Additive
G-046	Adhesive
G-047	Photo initiator, photo sensitive substance
G-048	Pigment, color, ink, paint
G-049	Solder masks and resists
G-050	Solvents
G-051	Water and water-based liquids
G-052	Hardener
G-053	Thinner
G-054	Leveling agent
G-055	Stabilizer
G-056	Plasticizer
G-057	Accelerator, catalyst
G-058	Curing agent
G-059	Oils, waxes
G-060	Molding additive

G-CAS	Substance Name (Other)
G-061	Glass
G-062	Liquid crystal mixture(displays)
G-063	Organic phosphorus compound
G-064	Yttrium aluminum garnet

4. chemSHERPA AI: 'Issuer'

The Article (AI) tool is colored in light blue.

Data entry support tool for the chemSHERPA-AI Issuer/Authorizer ToolVersion:chemSHERPA-A1.04.00

<<Issuer>> Import template Register template OK English must be filled in.

Item	English	Local
Organization ID	DUNS	
Company ID	987654321	
Company name	FUJIYAMA ELECTRONICS CO.,LTD.	富士山電子株式会社
Division name	Quality Mamagement Division	品質管理部
Title	Staff	スタッフ
Name of contact	Hanako Yoshida	吉田花子
Email address	Hanako.Yoshida@fujiyama.co.jp	
Phone number	123-456-789	
Extension number	9999	
Postal code	100-0011	
Country	Japan	
Prefecture	Tokyo	東京都
Municipality	Chiyodaku	千代田区
Address	1-2-3test	テスト町1-2-3

<<Authorizer>> Import template Register template

Items marked as '*' must be entered

5. chemSHERPA AI: 'General'

Items marked as '*' must be entered

Reference number needs to be the same as Product number.

Check the box

Product name

Our product number

Manufacturer name must also be entered

Choose 'mg' for the unit of mass

Choose 'piece' for the reporting unit

Mass (mass per product)
= total mass of materials ((mass x quantity) + (mass x quantity) + ...)

Enlarge or Reduce: Ctrl+scroll
Sort: click ▲▼ button of the details side of Product/Component

chemSHERPA-AI
Article Tool

General

Issuer/Authorizer

Reference number *

Preparation Date *

Authorization Date *

Item

Company name *

Name of contact *

Comment

Authorizer name *

Area

Requester

Information on requester On/Off

Reference number *

Request date *

Reply deadline

Remarks

Compliance only

Item

Company name *

Requester Name *

Requester Comment

Area

Product/Component

Product

Administrative

Composition

Compliance

Citing

Delete

Add

	Product name	Product number	Manufacturer name	Mass	Unit of mass	Product series name	Reporting unit	Remarks	Overall content flag	Valid From	Revision date	Revision history	Composition
1	PCB	284-A08293	△電気株式会社	13.6199	mg		piece		Y	2017-10-03			2017-10-03 14:07Fin...

Error check

Temporary save

Output (Request)

Output (Authorization)

6. chemSHERPA AI: 'Composition'

Items marked as '*' must be entered

For optional reporting substances (those other than chemSHERPA declarable substances), enter substance names (in English) and CAS numbers directly and check the box in the 'Optional reporting' section.

Data entry support tool for the chemSHERPA-AI Composition ToolVersion:chemSHERPA-A1.04.00

File

■ Composition

Product number: 284-A08293 Finalization date: 2017-10-04 21:40 Subject area: IEC62474

Product name: 回路基板 Mass of product: 13.6199mg

Composition Enlarge or Reduce: Ctrl+scroll Update substance information Delete All clear

Level	Name	Quantity	Component Name	Quantity	Usage	Classification symbol	Material Name	Mass	Unit	Material code of public standard	Remarks	Substance		Maximum content rate per materials	Remarks	Optional reporting
												Select	Add			
1			PCB	1	1.base material	N720	Ceramics	10.5813	mg	SUS304	△△電気機/R1 E82W32	Aluminium Oxide	1344-28-1	96		<input checked="" type="checkbox"/>
2												Magnesium Oxide	1309-48-4	0.8		<input checked="" type="checkbox"/>
3												Silica, crystalline	14808-60-7	3		<input type="checkbox"/>
4												Lead	7439-92-1	0.2		<input type="checkbox"/>
5			Resistor	2	1.base material	N721	Glass	0.0193	mg	GF+MD	〇〇製作所機/ EPX-150R	Silver (Ag)	7440-22-4	80		<input type="checkbox"/>
6												Cobalt(II) fluoride	10026-17-2	2		<input type="checkbox"/>
7												Palladium	7440-05-9	5		<input checked="" type="checkbox"/>
8												Silica, crystalline	14808-60-7	13		<input type="checkbox"/>
9			Resin	1	1.base material	N551	EP (Epoxy resin)	3	mg	EP66-GF25	□□化学機/...	Epoxy resin(EP)	G-007	75		<input checked="" type="checkbox"/>
10												Glass	G-061	25		<input checked="" type="checkbox"/>

Blank

Check if the mass of product is equal to the total mass [ex.] $13.6199 = (10.5813 \times 1) + (0.0193 \times 2) + (3 \times 1)$

Choose 'mg' for the unit

Enter a manufacturer name/ manufacturer's model number in the Remarks

Enter purpose of use in the Remarks

Make sure to check the total content of each component adds up to 100%.

Error check Release Finalize

Enter the material code when it can be expressed using an internationally recognized standard, such as JIS, etc. (the material code if any, must be entered).

- Enter material symbols defined by ISO 1043 for resin, ISO 1629 for rubber, and ISO 18064 for thermoplastic elastomers.
- For metal, etc., please enter material symbols specified by official material standards. Ex. enter 'S45C' for 'Steel S45C'
- Enter 'EP-GF30' for epoxy resin filled by glass fiber at 30% (Plastics EP).

- Enter CAS No. not G-CAS No. as much as possible.
- Enter a substance name for G-CAS No.
- Enter a '-' (one-byte hyphen) in 'CAS No.' if the CAS number cannot be disclosed.

7. chemSHERPA AI: 'Compliance'

■ Choose Y or N. (Note: the 'Entry Y' must be changed to Y or N.)
 ■ Choose N when the application is not reportable, even if the content rate is below or above the threshold.
 ■ Choose Y when the application is reportable and the content rate is above the reporting threshold.
 ■ Enter the content rate if Y is chosen. (Note: a denominator of the content rate changes depending on the reporting threshold.)

Items marked as '*' must be entered.

Compliance

Product number: 7-1
 Product name:
 Overall content flag: Y

Compliance Enlarge or Reduce: Ctrl+scroll All show Filtering Add Delete Convert from Composition All clear Update

	Subject substance		Candidate item <input type="checkbox"/> Show "ON" only Clear	Referenced laws & regulations	Type	Reportable applications	Reporting threshold	Content above the threshold	Content rate (ppm)	Quantity of content		Usage code
	CAS No./ Substance group ID	Substance/Substance group						<input type="checkbox"/> Show "Y" only Batch "N"		Quantity of content	Unit	
1	SG001	Asbestos	<input type="checkbox"/>	ANNEX XVII of REACH R...	All	Intentionally added [ReportingL...	N					
2	SG002	Azocolourants a...	<input type="checkbox"/>	ANNEX XVII of REACH R...	Textiles and Le...	0.003% by weight of the finishe...	N					
3	SG003	Boric acid	<input type="checkbox"/>	Candidate list for Europe...	All	0.1 mass% of article [Reporting...	N					
4	SG004	Brominated fla...	<input type="checkbox"/>	Industry Standards IEC 6...	Printed wiring b...	0.09 mass% total bromine conte...	N					
5			<input type="checkbox"/>	Joint JEDEC/ECA JS-709...	Plastic material...	0.1 mass% of bromine in plastic ...	N					
6	SG006	Cadmium/Cadm...	<input type="checkbox"/>	2011/65/EU (EU/RoHS Di...	All, except batt...	0.01 mass% of total Cd in homo...	N					
7			<input type="checkbox"/>	2006/66/EC EU Battery ...	Batteries	0.001% by weight of battery [R...	N					
8	SG008	Chromium (VI) ...	<input type="checkbox"/>	2011/65/EU (EU/RoHS Di...	All	0.1 mass% of total Cr+6 in hom...	N					
9	SG009	Dibutyltin (DBT)...	<input type="checkbox"/>	ANNEX XVII of REACH R...	All	0.1 mass% of tin in the part [Re...	N					
10	SG010	Dioctyltin (DOT)...	<input type="checkbox"/>	ANNEX XVII of REACH R...	(a) textile and l...	0.1 mass% of tin in the part [Re...	N					
11	SG011	Disodium tetrab...	<input type="checkbox"/>	Candidate list for Europe...	All	0.1 mass% of article [Reporting...	N					
12	SG012	Fluorinated Gre...	<input type="checkbox"/>	EU Reg. No. 842/2006	All	Intentionally Added [ReportingL...	N					
13	SG013	Hexabromocycl...	<input type="checkbox"/>	The Law Concerning the ...	All	Intentionally added or 0.1 mass...	N					
14	SG014	Lead/Lead Compounds	<input checked="" type="checkbox"/>	2011/65/EU (EU/RoHS Di...	All, except for:...	0.1 mass% of total Pb in homog...	Y	2000	0.0212	mg	RoHS-7(c)	
15			<input type="checkbox"/>	U.S. Consumer Product S...	Consumer prod...	0.01 mass% [ReportingLevel:Pr...	N					
16			<input type="checkbox"/>	U.S. Consumer Product S...	Paint and simila...	0.009 mass% of surface coating ...	N					
17			<input type="checkbox"/>	US/CA Proposition 65 Cas...	Cables/cords wi...	0.03 mass% of surface coating ...	N					
18			<input type="checkbox"/>	2006/66/EC EU Battery ...	Batteries	0.004 mass% of battery [Report...	N					
19	SG019	Mercury/Mercury	<input type="checkbox"/>	2011/65/EU (EU/RoHS Di...	All, except batt...	Intentionally Added or 0.1 mass...	N					

Return to general Transit to composition Error check Finalize

Do an error check when compliance assessment information is completed.

If there is no error, finalize.

Return to general, after finalize.

8. chemSHERPA AI: 'General'

Data entry support tool for the chemSHERPA-AI General ToolVersion:chemSHERPA-A1.04.00

File Company Language Tool chemSHERPA-AI Article Tool

■ General

Issuer/Authorizer			Requester	
Reference number *	284-A08293		Reference number *	
Preparation Date *	2017-10-03		Request date *	
Authorization Date *	2017-10-04		Reply deadline	
Item	English	Local	Remarks	<input type="checkbox"/> Compliance only
Company name *	FUJIYAMA ELECTRONICS CO. 富士山電子株式会社		Item	English Local
Name of contact *	Hanako Yoshida 吉田花子		Company name *	
Comment			Requester Name *	
Authorizer name *	Taro Kurechi 暮地太郎		Requester Comment	
Area	<input checked="" type="checkbox"/> IEC62474		Area	<input type="checkbox"/> IEC62474

Product/Component ☒ Product ☒ Administrative Composition Compliance Citing Delete Add

All	Product name	Product number	Remarks	Overall content flag	Valid From	Revision date	Revision history	Data entry status		Data export status	XML import status	Corresponding area
								Composition	Compliance			
1	PCB	284-A08293		Y	2017-10-03			2017-10-04 21:40Finalize	2017-10-04 22:21Finalize		Standard	IEC62474

For example, check the overall content flag of PCB is Y, as it contains a declarable substance.

Check if 'Finalize' is written

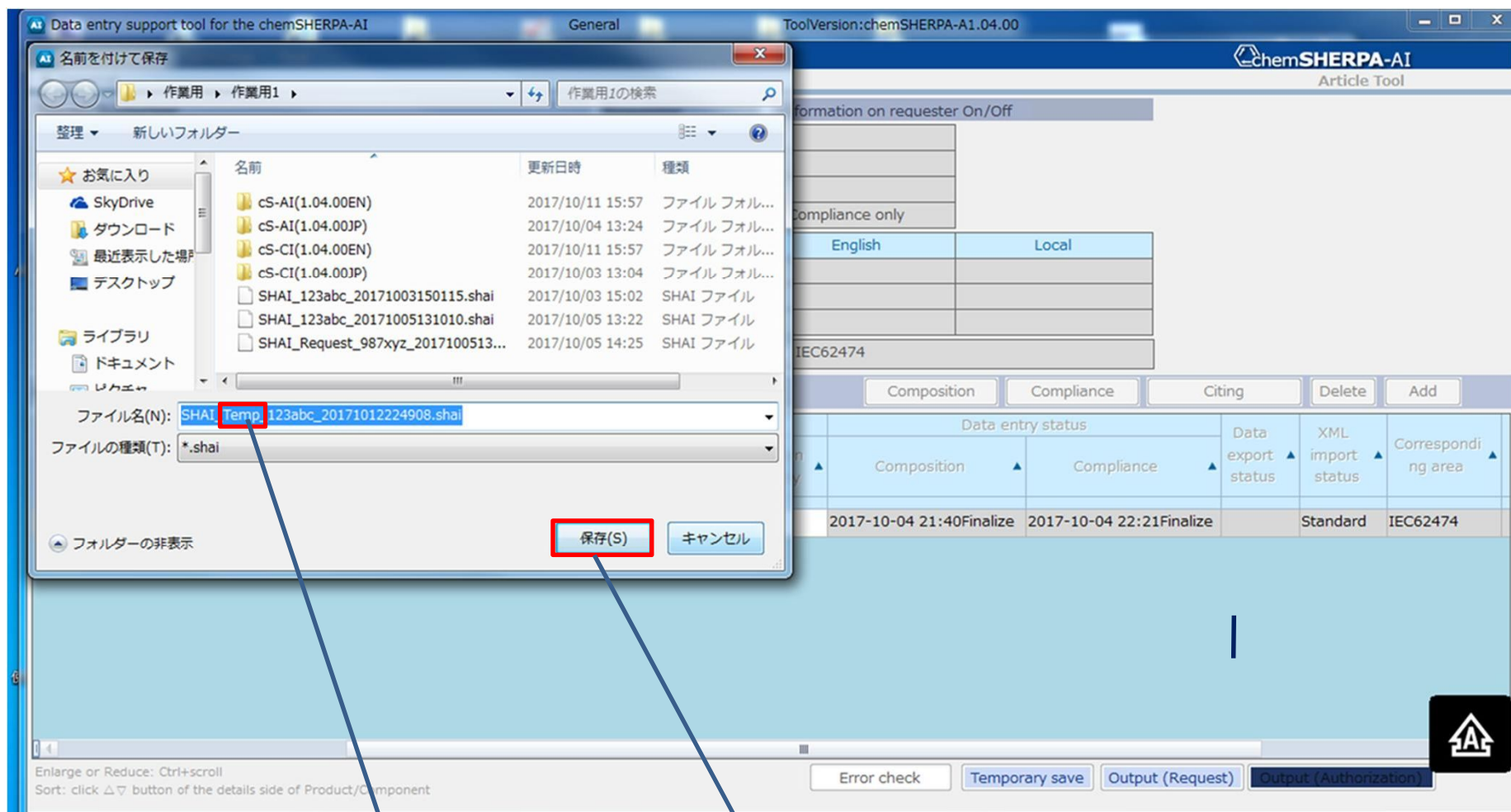
Check if 'Finalize' is written

Enlarge or Reduce: Ctrl+scroll
Sort: click ▲▼ button of the details side of Product/Component

Error check Temporary save Output (Request) Output (Authorization)

As data of contained chemicals is completed, output a temporary save file to provide the data to the Authorizer.

9. chemSHERPA AI: 'Temporary save'



An automatically indicated name of a temporary save file is "SHAI Temp_+ reference number + Date + .shai."
A temporary save file cannot be submitted, as it has not been approved yet.

Save the file.
AI (temporary saved file) is completed.

10. chemSHERPA AI: 'Authorizer'

Data entry support tool for the chemSHERPA-AI

General ToolVersion: chemSHERPA-A1.04.00

File Company Language Tool

chemSHERPA-AI Article Tool

General

Issuer/Authorizer Requester Information on requester On/Off

Reference number
Preparation Date
Authorization Date

Item
Company name
Name of contact
Comment
Authorizer name
Area

Product/Component

All Product name
1 ☒ PCB

<<Authorizer>> Import template Register template

Item	English	Local
Division name *	Quality Management Division	品質管理部
Title *	Senior Manager	シニアマネージャー
Authorizer name *	Taro Kurechi	暮地太郎
Email address *	taro.kurechi@fujiyama.co.jp	
Phone number *	123-456-789	
Extension number	1111	
Postal code	100-0011	
Country	Japan	
Prefecture	Tokyo	東京都
Municipality	Chiyodaku	千代田区
Address	1-2-3test	テスト町1-2-3

Add

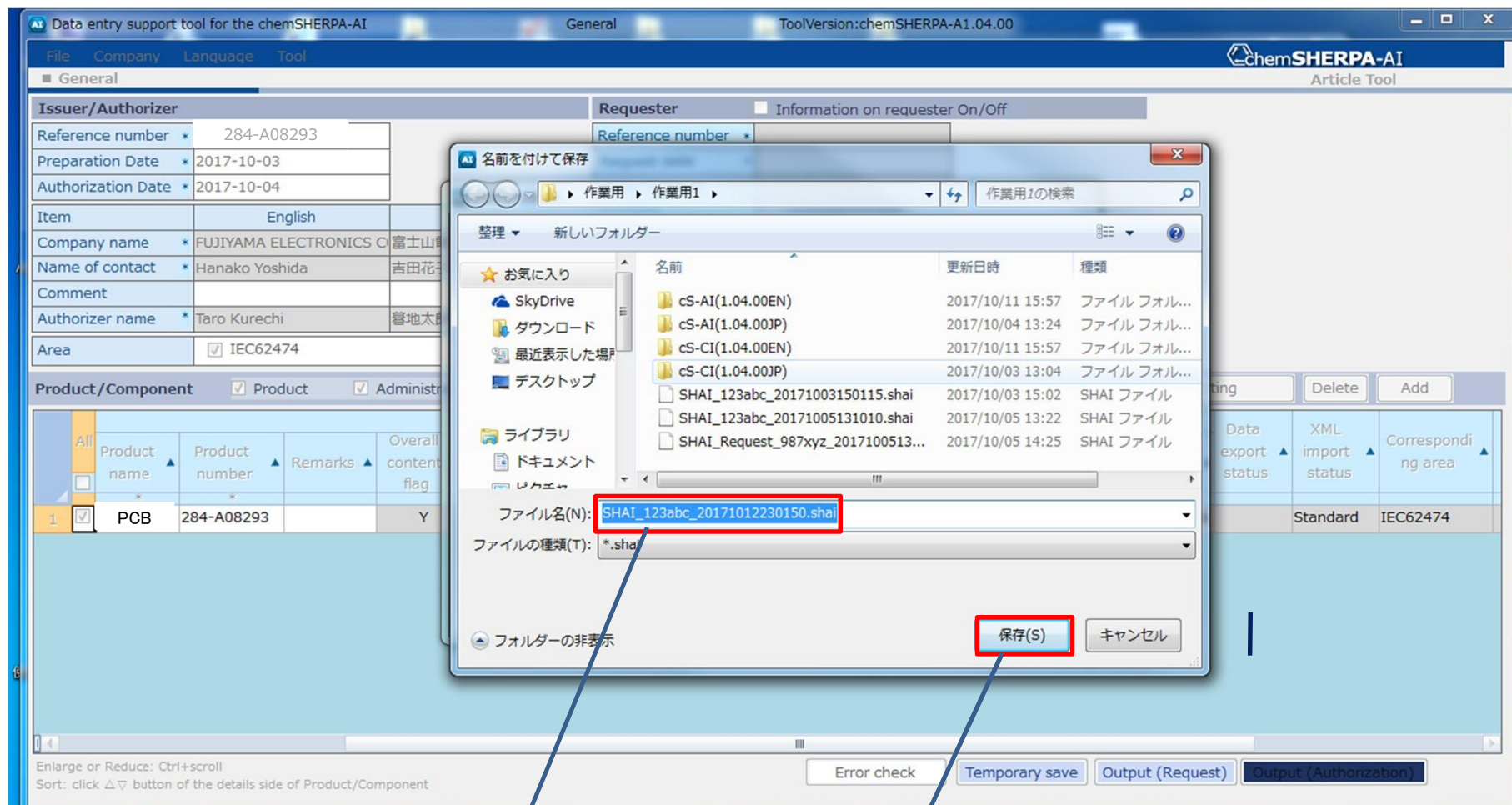
Corresponding area
IEC62474

Enlarge or Reduce: Ctrl+scroll
Sort: click ▲▼ button of the details side of Product/Component

Error check Temporary save Output (Request) Output (Authorization)

Items marked as '*' must be entered

11. chemSHERPA AI: Authorization, AI authorized file completion



An automatically indicated file name is "SHAI_ + reference number + date + .shai."
AI authorized file is completed.
This file can be submitted.

Save the file.
AI (authorized file) is completed.

15. chemSHERPA CI: differences from Article (AI)

The Chemical (CI) tool is colored in yellow. There are three major differences from the Article (AI) tool.

1st: 'General'
For the Chemical (CI) tool, enter composition information only. Compliance assessment information is not necessary.

2nd: 'Composition'
Choose 0 or 1 for the content status on declarable substances.
For the Chemical (CI) tool, report a substance name and its content rate only.
It is not necessary to enter Level, Component or Material.

3rd: 'Output'(in hard copy)
A hardcopy can be output with an authorized file at 'Output (Authorization).'
Others are almost the same as the Article tool.

Notes:

- Please see the operation manual, the data entry manual, FAQ, etc. for the use of the data entry support tool.
- Specifications of the data entry support tool are subject to change due to revision of laws and regulations or industry standards, addition or improvement of functions, etc.
- The manuals above are also subject to change as necessary.
- Please check the latest information on chemSHERPA and the latest version of data entry support tool or manuals on the websites.