SILFAB SOLAR MODULES SAFETY DATA REPORT (MSDS)

This document provides important safety information for the handling of Silfab Solar panels. It is meant to provide information typically included in a Material Safety Data Sheet. A solar panel is considered an Article as defined by OSHA HCS, 29 C.F.R 1910.1200 and is therefore exempt from Safety Data Sheet labeling requirements per said standard. This document provides important safety information in lieu of a full module standard for interested parties seeking a product safety datasheet and does not replace any other installation guidelines, warranty or safety documents provided by Silfab Solar Inc.

SECTION 1: IDENTIFICATION OF PRODUCT AND COMPANY

- Product Name: SIL-440 QD+, SIL-530 XM, SIL-580 XM+
- Product Type: Monocrystalline, Bifacial, NTC
- Company Info: Silfab Solar Inc.
- Address: 1770 Port Drive, Burlington, WA, 98233, United States
- Telephone: +1 360 569 4733

SECTION 2: SAFETY RISKS (HAZARD IDENTIFICATION)

Primary Hazards: Electrical shock, mechanical injury.

- Hazard Symbols: None under normal operating conditions.
- Environmental Hazard: None under normal operating conditions.

SECTION 3: COMPOSITION & INFORMATION OF INGREDIENTS

Section	Component	Material	Ratio (%)	Comments
Laminate	Glass	Silicon dioxide, Sodium oxide, Calcium oxide, Magnesium oxide	65%-75%	Not Hazardous
	Backsheet/ Encapsulant	Plastics (EVA, POE, PET, PPO, PE)	5%-10%	No Hazards Known
	Cell	Silicon	2%-4%	Not Hazardous
	Ribbons/ Metallization	Copper, Tin, Aluminum	< 2%	Not Hazardous
		Lead	< 0.1%	Hazardous
		Silver	<0.1%	Not Hazardous
Frame	Metal	Al / Magnesium/ Iron / Slilicon	10%-20%	Not Hazardous
	Adhesive	Silicone	1%-2%	Not Hazardous
Wiring	Cables/ Connectors / Junction Box	Copper	<1%	Not Hazardous
		Plastics (PPO, PPE, PE)	<0.5%	No Hazards Known
		Silicone	<0.5%	Not Hazardous

SECTION 4: FIRST AID MEASURES

- Eye Contact: Rinse if debris enters eyes.
- Skin Contact: Rinse if in contact with molten polymer.
- Inhalation: None under normal operating conditions.
- Electrocution: Follow OSHA guidelines.

SECTION 5: FIRE FIGHTING MEASURES

- Suitable Extinguishing Media: CO2, dry powder
- Special Equipment: A firefighter should use electrical-rated PPE and stay upwind.
- Risk of Reignition: Present when array is exposed to light.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Clean-up Procedure: Handle broken glass with gloves; dispose as electronic waste.
- Environmental Protection: Prevent runoff from entering water bodies.

SECTION 7: HANDLING AND STORAGE

- Store in dry and ventilated areas.
- Do not stack modules in a manner different from the way that they were originally packaged.
- Do not lift modules from the cables or junction box.
- Keep away from flammable gases and heat sources.
- Follow installation instructions.
- Panels should only be installed by qualified personnel.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION EQUIPMENT

- Protective Gloves: Are recommended during installation.
- Eye Protection: Safety glasses are recommended.
- Clothing: Use protective clothing if the module is broken or in a fire.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- Physical State: Solid
- Weight: QD = 46.3lbs, XM = 57.8lbs, XM+ = 62.8lbs
- Appearance: Glass-covered solar module
- Odor: Odorless
- Solubility in Water: Insoluble
- Operating Temperature Range: -40°C to +85°C
- Voltage per Module: Refer to electrical data sheet per module (avg. 50V max)

SECTION 10: STABILITY AND REACTIVITY

- Stability: Stable under normal use.
- Conditions to Avoid: Fire, high humidity, direct impact
- Hazardous Decomposition: CO, SiO2 fumes if combusted
- Incompatibility: Strong oxidizing agents

SECTION 11: TOXICOLOGICAL INFORMATION

- Acute Toxicity: None expected under normal use.
- Skin/Eye Irritation: None unless broken.
- Carcinogenicity: Not classified

SECTION 12: ECOLOGICAL INFORMATION

- Long Lasting components, non-biodegradable
- Recommended recycling at end-of-life

SECTION 13: DISPOSAL CONSIDERATIONS

- Recycle according to local e-waste guidelines
- Do Not incinerate

SECTION 14: TRANSPORT INFORMATION

- Not Classified as hazardous
- Pack with care to prevent damage during transit

SECTION 15: REGULATORY INFORMATION

- Compliant with: IEC 61215, IEC 61730, UL 61730
- OSHA Classification: Article (not hazardous chemicals)

Printed documents are UNCONTROLLED unless stamped as “Controlled Document.”

SILFAB SOLAR INC.

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SILFABSOLAR.COM

5/9/2025

Silfab Solar

1770 Port Dr.

Burlington, WA 98233

Dear Silfab Solar,

On 5/5/2025 environmental solids samples were received by Precision Analytical Laboratory for analysis. One sample was received by the laboratory and assigned the sample identification number of 2505027. The project was identified as SIL-XM+-001. The sample identification and analysis is outlined in the attached raw data and documents. Information provided by the client and the sampler can impact the validity of results.

No abnormalities were noted upon intake of the sample.

The results produced here are relevant only to the sample submitted for testing and do not apply to similar waste streams. Do not reproduce this report, except in full, without approval from Precision Analytical Laboratories. Please do not hesitate to call me if you have any further questions or need assistance.

Sincerely,

PAL

Julia C. Redfield

Laboratory Director

PAL
PRECISION ANALYTICAL LABORATORIES

2505027

PRECISION ANALYTICAL LABORATORY

Certificate of Analysis

Client:	Silfab Solar		
	1770 Port Dr.	Date:	5/9/2025
	Burlington, WA 98233	WMC-AL Job#:	2505027
		Date Received:	5/5/2025
Client Contact:	Eric Schneller	Collection Date:	4/15/2025
Client Project:		Accreditation#:	L22-468
Client Sample ID:	SIL-XM+-001	WADOE Accreditation#:	WA01069

Sample Results

Analyte	Method	Results	Reporting Limits	Dilution Factor	Units	Analysis Date	Analysis By
Arsenic	EPA – 6010D - 1311	U	0.06	1	mg/L	5/8/2025	SKG
Barium	EPA – 6010D – 1311	U	0.006	1	mg/L	5/8/2025	SKG
Cadmium	EPA – 6010D – 1311	U	0.012	1	mg/L	5/8/2025	SKG
Chromium	EPA – 6010D – 1311	U	0.03	1	mg/L	5/8/2025	SKG
Lead	EPA – 6010D – 1311	0.821	0.06	1	mg/L	5/8/2025	SKG
Selenium	EPA – 6010D – 1311	U	0.03	1	mg/L	5/8/2025	SKG
Silver	EPA – 6010D – 1311	J	0.003	1	mg/L	5/8/2025	SKG
Mercury	EPA – 7471A – 1311	U	0.0002	1	mg/L	5/8/2025	SKG/MJC

U – Analyte was not detected above the reporting limit. J – sample was detected above the method detection limit but below the reporting limit.

Certificate of Analysis

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	1770 Port Dr.	Date:	5/9/2025
	Burlington, WA 98233	WMC-AL Job#:	2505027
		Date Received:	5/5/2025
Client Contact:	Eric Schneller	Collection Date:	4/15/2025
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Client Sample ID:	SIL-XM+-001	WADOE Accreditation#:	WA01069

Laboratory Blank Results

Analyte	Method	Results	Reporting Limits	Dilution Factor	Units	Analysis Date	Analysis By
Method Blank							
Arsenic	EPA – 6010D – 1311	U	0.06	1	mg/L	5/8/2025	SKG
Barium	EPA – 6010D – 1311	U	0.003	1	mg/L	5/8/2025	SKG
Cadmium	EPA – 6010D – 1311	U	0.012	1	mg/L	5/8/2025	SKG
Chromium	EPA – 6010D – 1311	U	0.03	1	mg/L	5/8/2025	SKG
Lead	EPA – 6010D – 1311	U	0.06	1	mg/L	5/8/2025	SKG
Selenium	EPA – 6010D – 1311	U	0.03	1	mg/L	5/8/2025	SKG
Silver	EPA – 6010D – 1311	U	0.003	1	mg/L	5/8/2025	SKG
Mercury	EPA – 7471A – 1311	U	0.000002	1	mg/L	5/8/2025	SKG/MJC

U – Analyte analyzed for but not detected at a level above the reporting limit.

ADDRESS 3430 16th Street Everett, WA 98201 PHONE 425.740.4597 FAX 425.317.9580
Precision
Analytical Laboratory

Certificate of Analysis

Client:	Silfab Solar		
	1770 Port Dr.	Date:	5/9/2025
	Burlington, WA 98233	WMC-AL Job#:	2505027
		Date Received:	5/5/2025
Client Contact:	Eric Schneller	Collection Date:	4/15/2025
Client Project:		Accreditation#:	L22-468
Client Sample ID:	SIL-XM+-001	WADOE Accreditation#:	WA01069

Duplicate Sample Results

Analyte	Method	RPD	Qualifier	Limits	Analysis Date	Analysis By
Duplicate Sample Results						
Arsenic – DUP	EPA – 6010D – 1311	0.0		25	5/8/2025	SKG
Barium – DUP	EPA – 6010D – 1311	2.4		25	5/8/2025	SKG
Cadmium – DUP	EPA – 6010D – 1311	0.0		25	5/8/2025	SKG
Chromium – DUP	EPA – 6010D – 1311	1.9		25	5/8/2025	SKG
Lead – DUP	EPA – 6010D – 1311	0.0		25	5/8/2025	SKG
Selenium – DUP	EPA – 6010D – 1311	0.0		25	5/8/2025	SKG
Silver – DUP	EPA – 6010D – 1311	0.0		25	5/8/2025	SKG
Mercury – DUP	EPA – 7471A – 1311	0.0		25	5/8/2025	SKG/MJC

Approved by:

Laboratory Director

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