

# Safety Data Sheet

SDS #: D-40042

## Silicate Coating for Xerox® ElemX™ 3D Printer

Issuing Date 2023-02-22

Revision Date 2023-03-23

Version 1

**Active**

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**Product Identifier**

**Product Name**

Build Plate Release Solution for Xerox® ElemX™ 3D Printer

Part no. 093K42720

Color Clear  
Pure substance/mixture Mixture

**Relevant identified uses of the substance or mixture and uses advised against**

Recommended Use Aluminum metal additive manufacturing

**Details of the supplier of the safety data sheet**

Manufactured by Xerox Corporation  
Webster, NY 14580

**For further information, please contact**

Contact person Manager, Environment, Health, Safety & Sustainability  
E-mail address askxerox@xerox.com  
Emergency telephone Safety Information US: (800) 275-9376  
Chemical Emergency only (Chemtrec) (800) 424-9300

For the most current document <https://safetydatasheets.business.xerox.com>

### 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

|  |                                |
|--|--------------------------------|
| Skin Corrosion/Irritation                        | Category 1 B                   |
| Serious eye damage/eye irritation                | Category 1                     |
| Specific target organ toxicity (single exposure) | Category 3, Respiratory system |
| Substances/mixtures corrosive to metal           | Category 1                     |

**Label elements**

**GHS Label elements, including precautionary statements**

Symbol(s)



**Silicate Coating for Xerox® ElemX™ 3D Printer**

|                                 |  |
|---------------------------------|--|
| <b>Signal Word</b>              | Danger<br>Warning  |
| <b>Hazard Statements</b>        | H290 - May be corrosive to metals<br>H314 - Causes severe skin burns and eye damage<br>H318 - Causes serious eye damage<br>H335 - May cause respiratory irritation   |
| <b>Precautionary Statements</b> | P234 - Keep only in original container<br>P260 - Do not breathe dust/fume/gas/mist/vapors/spray<br>P264 - Wash hands thoroughly after handling<br>P271 - Use only outdoors or in a well-ventilated area<br>P280 - Wear protective gloves/protective clothing/eye protection/face protection<br>P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting<br>P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower<br>P363 - Wash contaminated clothing before reuse<br>P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing<br>P310 - Immediately call a POISON CENTER or doctor/physician<br>P312 - Call a POISON CENTER or doctor/physician if you feel unwell<br>P321 - Specific treatment (see supplemental first aid instructions on this label)<br>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing<br>P403 + P233 - Store in a well-ventilated place. Keep container tightly closed<br>P390 - Absorb spillage to prevent material damage<br>P405 - Store locked up<br>P501 -Dispose of contents/container in accordance with local/regional/national/international regulation. |

**Other hazards**

No hazard expected under normal conditions of use

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Mixtures**

| Chemical Name         | CAS No.   | Weight % | Classification (Reg. 1272/2008)   | Hazard Statements                                    |
|-----------------------|-----------|----------|---|--|
| Water                 | 7732-18-5 | 79.6     | --  | --   |
| Sodium silicate       | 1344-09-8 | 20       | Eye Dam. 1<br>STOT SE 3 (Resp.)<br>Skin Corr. 1B<br>Met. Corr. 1  | H318<br>H335<br>H314<br>H290                         |
| Sodium Lauryl Sulfate | 151-21-3  | 0.4      | Skin Irrit. 2<br>Acute Tox. 4 (oral)<br>Eye Dam. 1<br>STOT SE 3 (Resp.)<br>Aquatic Chronic 3<br>Flam. Sol. 2<br>Acute Tox. 4 (inhal.) | H315<br>H302<br>H318<br>H335<br>H412<br>H228<br>H332 |

"--" indicates no classification or hazard statements apply.

Full text of H- statements: see section 16

**4. FIRST AID MEASURES**

**Description of first-aid measures**

|                       |   |
|-----------------------|---|
| <b>General advice</b> | IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.                         |
| <b>Eye contact</b>    | Rinse immediately with plenty of water and seek medical advice  |
| <b>Skin contact</b>   | Remove contaminated clothing and shoes, Wash off with soap and water, Wash contaminated clothing before reuse |
| <b>Inhalation</b>     | Move to fresh air   |
| <b>Ingestion</b>      | Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention                |

**Most important symptoms and effects, both acute and delayed**

**Acute toxicity**

|                   |   |
|-------------------|---|
| <b>Eyes</b>       | Irritating to eyes  |
| <b>Skin</b>       | Skin corrosion/irritation   |
| <b>Inhalation</b> | May cause irritation of respiratory tract   |
| <b>Ingestion</b>  | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea, Not an expected route of exposure |

**Chronic toxicity**

No known effect

**Indication of immediate medical attention and special treatment needed**

|                                   |  |
|-----------------------------------|--|
| <b>Protection of first-aiders</b> | No special protective equipment required |
| <b>Notes to physician</b>         | Treat symptomatically                    |

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media**

|                                       |                                |
|---------------------------------------|--------------------------------|
| <b>Suitable extinguishing media</b>   | Use CO2, dry chemical, or foam |
| <b>Unsuitable extinguishing media</b> | Not applicable                 |

**Special hazards arising from the substance or mixture**

Thermal decomposition can lead to release of toxic and corrosive gases/vapors

**Advice for fire-fighters**

Wear self-contained breathing apparatus and protective suit

**Other information**

|                     |   |
|---------------------|---|
| <b>Flammability</b> | Not flammable. Will not readily ignite. |
| <b>Flash point</b>  | Not flammable                           |

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation, For personal protection see section 8

**Environmental precautions**

Prevent product from entering drains

**Methods and material for containment and cleaning up**

|                                |   |
|--------------------------------|---|
| <b>Methods for containment</b> | Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal |
|--------------------------------|---|

**Methods for cleaning up**                      Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container, Do not dispose of waste into sewer

**Reference to other sections**

See section 12 for additional ecological information  
See Section 13 for additional information

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling**                      When using, do not eat, drink or smoke, For personal protection see section 8

**Hygiene measures**                              Avoid contact with skin, eyes and clothing  
Wash thoroughly after handling

**Conditions for safe storage, including any incompatibilities**

**Technical measures and storage conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place, Keep from freezing, Keep away from food, drink and animal feedingstuffs

**Incompatible products**                      Aqueous solutions will react with aluminium, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air

**Specific end uses**

Solvent mixture

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Limits**

**Exposure controls**

**Engineering measures**                      Ensure adequate ventilation, especially in confined areas

**Individual protection measures, such as personal protective equipment (PPE)**

**Eye/Face protection**                      Goggles, Face-shield  
**Hand protection**                              Polyvinylchloride (PVC), Rubber gloves  
**Skin and body protection**                      Wear suitable protective clothing, including eye/face protection and gloves (see section 16)  
**Respiratory protection**                      Effective dust mask.

**Environmental Exposure Controls**

**Environmental Exposure Controls**                      Prevent product from entering drains

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

|                       |                 |                       |                          |
|-----------------------|-----------------|-----------------------|--------------------------|
| <b>Appearance</b>     | Clear<br>Liquid | <b>Odor</b>           | Odorless                 |
| <b>Physical state</b> | Liquid          | <b>Odor threshold</b> | No information available |
| <b>Color</b>          | Clear           | <b>pH</b>             | 10.7-11.1                |
| <b>Flash point</b>    | Not flammable   |                       |                          |

**Melting / Freezing Point** Not applicable  
**Softening point** Not applicable

**Evaporation rate** No information available  
**Flammability** Not flammable. Will not readily ignite.  
**Flammability Limits in Air**

**Vapor pressure** No information available  
**Vapor density** No information available  
**Specific gravity**  
**Water solubility** No information available  
**Partition coefficient** No information available  
**Decomposition temperature** Not determined  
**Viscosity** No information available  
**Explosive properties** Not explosive  
**Oxidizing properties** Not applicable

**Other information**  
 None

**10. STABILITY AND REACTIVITY**

**Reactivity**  
 No dangerous reaction known under conditions of normal use

**Chemical stability**  
 Stable under normal conditions.

**Possibility of hazardous reactions**  
**Hazardous reactions** None under normal processing  
**Hazardous polymerization** Hazardous polymerization does not occur

**Conditions to avoid**  
 Heat, flames and sparks. Take precautionary measures against static discharges.

**Incompatible Materials**  
 Aqueous solutions will react with aluminium, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air

**Hazardous decomposition products**  
 Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot

**11. TOXICOLOGICAL INFORMATION**

**Information on toxicological effects**

**Acute toxicity**  
**Product Information**  
**Irritation** Irritating to eyes, respiratory system and skin

**Component Information**

| Chemical Name         | Oral LD50          | Dermal LD50           | LC50 Inhalation                    |
|-----------------------|--------------------|-----------------------|------------------------------------|
| Sodium silicate       | 1960 mg/kg ( Rat ) | 4640 mg/kg ( Rabbit ) |                                    |
| Sodium Lauryl Sulfate | 1288 mg/kg ( Rat ) | 200 mg/kg ( Rabbit )  | 3900 mg/m <sup>3</sup> ( Rat ) 1 h |

**Chronic toxicity**

**Sensitization** May cause sensitization by inhalation and skin contact  
**Neurological Effects** No information available  
**Target organ effects** No information available

**CMR Effects**

**Mutagenic effects** No information available  
**Reproductive toxicity** This product does not contain any known or suspected reproductive hazards  
**Carcinogenicity** Contains no ingredient listed as a carcinogen

**Other toxic effects**

**Aspiration Hazard** Not applicable  
**Other adverse effects** Irritating to eyes, respiratory system and skin

**Information on other hazards**

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors

**12. ECOLOGICAL INFORMATION**

**Toxicity**

**Acute Aquatic Toxicity** On available data, substance is not harmful to aquatic life  
**Chronic Aquatic Toxicity** On available data, substance is not harmful to aquatic life

**Component Information**

| Chemical Name         | Toxicity to algae   | Toxicity to fish   | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|-----------------------|---|--|----------------------------|---|
| Sodium silicate       |   | LC50 301 - 478 mg/L<br>Lepomis macrochirus 96 h<br>LC50= 3185 mg/L<br>Brachydanio rerio 96 h   |                            | EC50 = 216 mg/L 96 h                                |
| Sodium Lauryl Sulfate | 53 mg/L EC50 72 h (Desmodesmus subspicatus) 30 - 100 mg/L EC50 96 h (Desmodesmus subspicatus) 117 mg/L EC50 96 h (Pseudokirchneriella subcapitata) 3.59 - 15.6 mg/L EC50 96 h (Pseudokirchneriella subcapitata) | LC50 4.2 - 4.8 mg/L<br>Lepomis macrochirus 96 h LC50 8 - 12.5 mg/L<br>Pimephales promelas 96 h LC50 15 - 18.9 mg/L<br>Pimephales promelas 96 h LC50 22.1 - 22.8 mg/L<br>Pimephales promelas 96 h LC50 4.3 - 8.5 mg/L<br>Oncorhynchus mykiss 96 h LC50= 4.2 mg/L<br>Oncorhynchus mykiss 96 h LC50= 4.5 mg/L<br>Lepomis macrochirus 96 h LC50 10.2 - 22.5 mg/L<br>Pimephales promelas 96 h LC50 6.2 - 9.6 mg/L<br>Pimephales promelas 96 h LC50= 1.31 mg/L<br>Cyprinus carpio 96 h LC50= 4.62 mg/L<br>Oncorhynchus mykiss 96 h LC50 4.06 - 5.75 mg/L<br>Lepomis macrochirus 96 h LC50 5.8 - 7.5 mg/L<br>Pimephales promelas 96 h LC50 13.5 - 18.3 mg/L<br>Poecilia reticulata 96 h LC50 10.8 - 16.6 mg/L<br>Poecilia |                            | EC50 = 1.8 mg/L 48 h                                |

|  |  |  |  |
|--|--|--|--|
|  |  | reticulata 96 h LC50= 7.97 mg/L Brachydanio rerio 96 h LC50 9.9 - 20.1 mg/L Brachydanio rerio 96 h |  |
|--|--|--|--|

**Persistence and degradability**

Not readily biodegradable

**Bioaccumulative potential**

Bioaccumulation is unlikely

**Mobility in soil**

Soluble in water

**Component Information**

| Chemical Name         | log Pow |
|-----------------------|---------|
| Sodium Lauryl Sulfate | 1.6     |

**Results of PBT and vPvB assessment**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)

**Endocrine disrupting properties**

This product does not contain any known or suspected endocrine disruptors

**Other adverse effects**

No information available

13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Waste Disposal Methods** Dispose of in accordance with all applicable local and national environmental laws and regulations

**Contaminated packaging** Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION

This material is subject to regulation as a hazardous substance as listed below.

| Regulation | UN/ID No | Proper shipping name                       | Hazard class | Subsidiary hazard class | Packing Group | Exceptions |
|------------|----------|--|--------------|-------------------------|---------------|------------|
| DOT        | UN3266   | Corrosive liquid, basic, inorganic, n.o.s. | 8            | --                      | III           | --         |
| ICAO/IATA  | UN3266   | Corrosive liquid, basic, inorganic, n.o.s. | 8            | --                      | III           | --         |
| IMDG/IMO   | UN3266   | Corrosive liquid, basic, inorganic, n.o.s. | 8            | --                      | III           | --         |

15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Canada**

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR), and the SDS contains all the information required by the HPR.

**International Inventories**

**TSCA** Complies  
**DSL/NDSL** Complies

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

This product is subject to U.S. State Right-to-know regulations as noted below.

| Chemical Name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---------------|---------------|------------|--------------|----------|--------------|
| Water         |               |            | X            |          |              |

**16. OTHER INFORMATION**

**Issuing Date** 2023-02-22  
**Revision Date** 2023-03-23  
**Revision Note** Initial Release

**Full text of H-Statements referred to under sections 2 and 3**

- H228 - Flammable solid
- H290 - May be corrosive to metals
- H302 - Harmful if swallowed
- H314 - Causes severe skin burns and eye damage
- H315 - Causes skin irritation
- H318 - Causes serious eye damage
- H332 - Harmful if inhaled
- H335 - May cause respiratory irritation
- H412 - Harmful to aquatic life with long lasting effects

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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