Elaboro GmbH
Hagenower Str. 73
19061 Schwerin | Germany

Instructions for Use

English

Telephone: +49 (0) 385 3993300
Telefax: +49 (0) 385 3993300
Email: info@elaboro.de
Internet: www.elaboro.de

GA LiSi LOW FUSE EN

Rev. 01/2022

elaboro® LiSi LOW FUSE

Type identification, classification, marking according to DIN EN ISO 6872:
Dental ceramic type I, Class 1a, Ceramic raw materials for the extraoral manufacture of dentures

1. Scope

elaboro® LiSi LOW FUSE is a ready-to-use and easy-to-apply lithium silicate glaze for dental ceramics. In order to optimally coat the denture with elaboro® LiSi LOW FUSE, you do not need any special surface preparation, no adhesion promoter, no solvents and no preparatory firing. The ceramic parts should simply be clean, free of dust and grease in order to guarantee even coating results. elaboro® LiSi LOW FUSE is suitable for all dental ceramics with a processing temperature not below 800°C.

2. Safety Notes

Please observe the instructions on the label of the spray can: Flammable aerosol. The container is under pressure: it can burst when subjected to heat. Causes severe eye irritation. Keep away from heat, hot surfaces, sparks, open flames and other types of ignition sources. No smoking. Do not spray in the direction of an open flame or other source of ignition. Do not pierce or burn, even after use. Wear protective gloves/protective clothing/eye protection/mask. In case of persistent eye irritation: seek medical advice/seek medical help. Protect against sunlight. Do not expose to temperatures above 50°C/122°F. Please observe our safety data sheet Link [*www.elaboro.de*].

3. Work Environment

Store the elaboro® LiSi LOW FUSE spray cans at room temperature. Use elaboro® LiSi LOW FUSE at room temperatures of 15–35°C. Too high or too low ambient temperatures will negatively affect the spray result. Only use the spray in well-ventilated rooms, use suitable suction systems and wear a dust protection mask to protect against the fine spray. Make sure to use the spray in good lighting, so that you can see whether the restoration has been coated evenly and completely.

4. General Information on Handling

elaboro® LiSi LOW FUSE is intended exclusively for use in dental laboratories by trained personnel.

- Only use in well ventilated rooms.
- It is not permitted for intraoral use.
- Do not inhale the spray mist.
- Wear a dust protection mask and a suitable workplace suction unit.
- The aerosol container is under pressure and must be protected from sunlight and temperatures above 50°C/122°F.
- No smoking.
- Keep away from sources of ignition.
- Do not spray in the direction of open flames (e.g., Bunsen burners) or on hot surfaces.
- Keep out of the reach of children.
- After use, do not force open or burn.
- Always empty the spray can fully.

5. Preparing the Zirconium Oxide Restoration

The finished, ground and adjusted restoration must be dry, clean and free of dust and grease in order to achieve optimal results. Glazing with elaboro® LiSi LOW FUSE requires only a small amount of material to be applied, depending on the porosity and roughness of the ceramic to be veneered, the spray intensity should be varied. In the case of fully anatomical monolithic restorations, functional and aesthetic features such as occlusal surfaces, contact points, color gradients and effects should be considered, before glazing. Crown margins, marginal fits and occlusion are practically unaffected by a single layer application. We recommend only applying the final elaboro® LiSi LOW FUSE layer after the dental try-in and any corrections.

6. Normal Use

Step 1:

Before attaching the spray head for the first time, shake the spray can intensively in order to activate the spray composition, so that the ceramic particles mix fully with the mixing liquid within the spray can. The mixing balls can be clearly heard after just a few seconds, but still shake the spray can vigorously for one minute.

Step 2:

Now, attach the spray head with the spray lance and shake again briefly. The spray is now ready for use. After short spray breaks of non-use, shake the spray up again using circular movements. This procedure is essential. A good preparation ensures optimal spray results and prevents failure of nozzles, tubes and the valve

7. Before Initial Use

Before initial use, test the spray on a glass panel first. Make sure you spray at the correct distance of approx. 15-20cm from the object. With short spurts of spray, you will achieve an optimal layer application. Only use the spray head provided. Wet spots or "drips" are an indication that the spray distance is too close. Uneven powder deposits mean too much has been sprayed or the can has not been shaken sufficiently and the powder is not mixed entirely.

8. Spray Technique

During use, hold the spray can in an upright position as much as possible. Unlike applying a lacquer, it is advisable to apply elaboro® LiSi LOW FUSE in short sprays. This way, only small amounts of powder are distributed, at the same time the nozzle system cleans itself during this procedure.

9. Layer Thickness

Incorrectly sprayed parts can be easily washed off with water or steam cleaned away, the same applies if too much material has been applied. After drying with compressed air, the elaboro® LiSi LOW FUSE can be sprayed once again. If small areas are damaged during the handling of the sprayed dental restorations, these can be easily re-sprayed thinly.

10. Error Handling when Spraying

Incorrectly sprayed parts can easily be washed off with water or steamed off, the same applies if too much material has been applied. After drying with compressed air, elaboro® LiSi LOW FUSE is sprayed on. If small areas are damaged when handling the sprayed tooth restoration, these can easily be sprayed on thinly.

11. Ceramic Firing

Conduct the ceramic firing in accordance with the specifications (firing parameters table). During the diffusion firing, components of the dental ceramics and components of elaboro® LiSi LOW FUSE diffuse reciprocally in the area near the surface and form a strong bond when cooling. At the same time, a very smooth surface is formed.

a. ***Simple glaze firing:*** elaboro® LiSi LOW FUSE is a universal colorless thin layer glaze. After just one firing, you get a resilient, smooth and homogeneous surface of the best quality, with an optimal adhesive bond to the ceramic base.

b. ***Handling stains:*** stains are applied directly to the restoration. After the stains have dried, the restoration is sprayed thinly with elaboro® LiSi LOW FUSE and fired. The surface should then be shiny, non-porous and homogeneous. Depending on the surface texture of the dental ceramic, it may be necessary to spray and fire on another layer. Stains with a firing temperature below 800°C should first be fired on separately.

12. Troubleshooting

The elaboro® LiSi LOW FUSE coating is only 10-15µm thin in normal use. If small pores are visible in the surface after firing in the furnace, this is due to insufficient powder application. Spray the restoration again – without any surface preparation – and repeat the firing. If necessary, check the furnace calibration and firing parameters.

13. Cleaning

After using the spray can, immediately clean the spray head (e.g., by rinsing with hand-warm water and cleaning with compressed air, if necessary, also in an ultrasonic bath). Then, dry the head with compressed oil, free air.

14. Instructions for the Practitioner

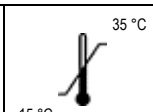
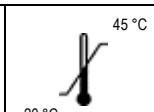
During a professional tooth cleaning treatment (prophylaxis), elaboro® LiSi LOW FUSE treated surfaces must not be blasted with powder materials. Roughened glass ceramic surfaces are permanent and will lead to an accumulation of plaque. elaboro® LiSi LOW FUSE can also be used for additional indications.
A detailed step by step guide for the additional uses can be found on our website *www.elaboro.de*.
It is essential to follow the firing parameters specified in this instruction manual. Please also refer to the information on workplace exposure, transport and storage specifications in the safety data sheet.

Glaze Firing with elaboro® LiSi LOW FUSE

Closing Time	Standby Temperature	Heating Rate	Firing Temperature	Dwell Time	Long-term Cooling	Cooling Rate	Vacuum
min.	°C	°C/min.	°C	Min.	Depending on the Frame Size	°C/min.	400°C
1	400	50	800	1–3	Yes	20…80	max. 30%

Transparent Lithiumsilicat spray
LiSi LOW FUSE
Low Fusing Glaze for dental ceramics

Explanations of Danger and Information Signs

									
Manufacturer	Observe the instructions for use.	Attention! Observe Warnings!	Item No.	Lot No.	Application Temperature	Storage and Transport Temperature	Expiration Date	Caution! Flammable aerosol!	Causes serious eye irritation.