Combatting glass mildew at BOST

BOST GROUP's portfolio includes products specifically engineered to tackle the so-called 'mildew' phenomenon, which refers to the initial mouldy stage when a glass surface is slightly rough and with a mould that's invisible to the naked eye while the glass itself is more difficult to clean and easy to stain.

Small spots will gradually appear, as will flakes, filaments and misty spots. Rainbows, too, will be visible as the glass surface becomes rough to the touch and its smoothness and transparency is significantly reduced.

GLASS SURFACE WEATHERING PROCESS

Glass surface weathering initially manifests itself when the surface reacts to atmospheric moisture which, in formula terms, translates as:

$\equiv Si-O-Na + H_2O \rightarrow \equiv SiOH + NaOH$

This renders the glass surface alkaline with the result that spots are produced on the surface -some of them tiny- by a phenomenon often termed alkali evolution.

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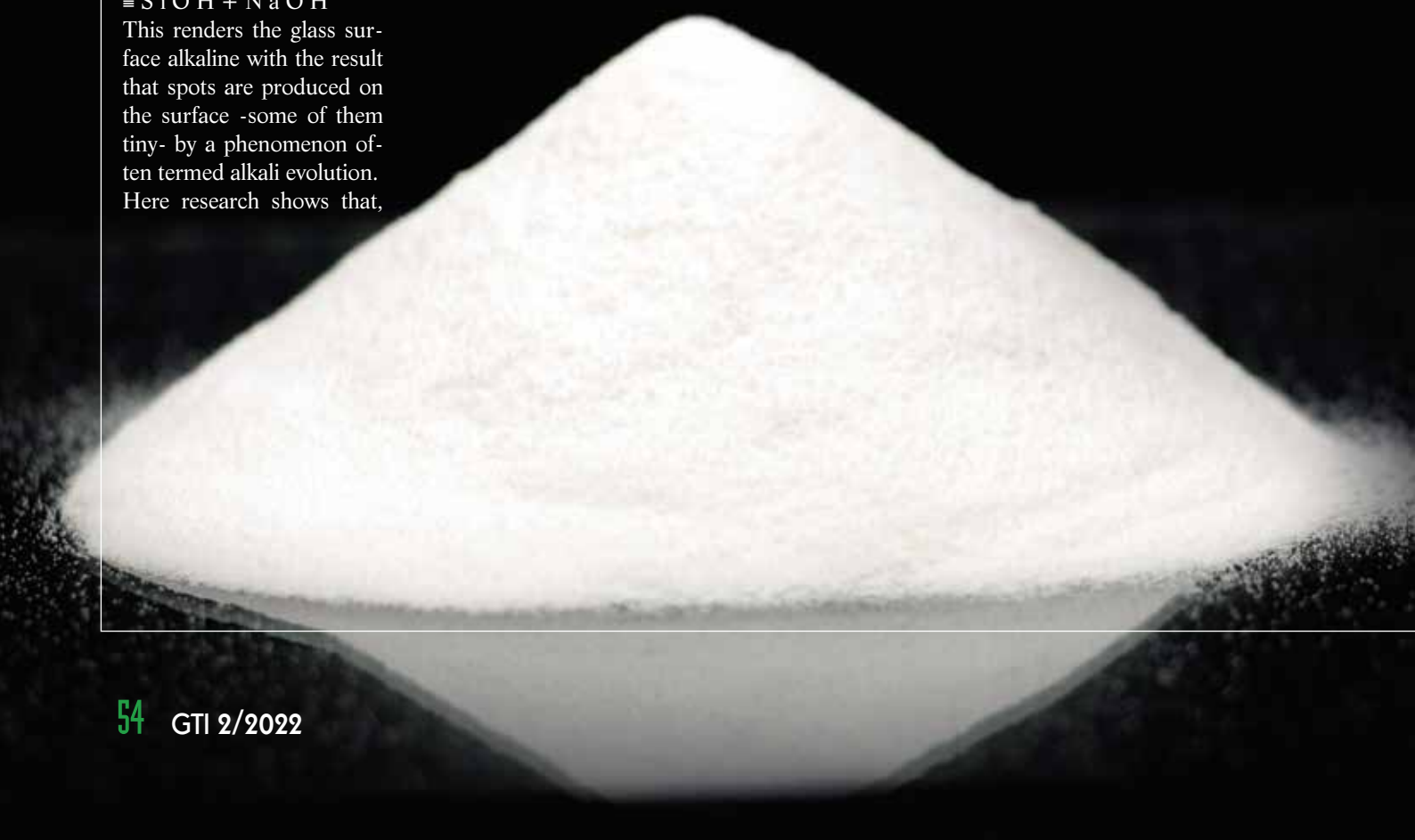
$SiO_2 + 4NaOH = Na_4SiO_4 + 2H_2O$

With the glass network structure thus eroded and damaged by the reaction process, the glass becomes rough - also producing rainbows while experiencing some reduction in transmittance.



WHY CHOOSE ANTI-STAIN INTERLEAVING POWDER FOR MILDEW PREVENTION?

Factors affecting glass weathering (mould) include chemical composition, phase separation, the annealing process, environmental conditions (temperature, humidity, atmosphere), weathering time and glass surface treatment.

As such, glass mildew resistance should at least be improved by the following five methods:

1. Adoption of a suitable raw material formula with a composition equipped to improve chemical stability of the glass body itself;
2. Optimization of oxidation and atmospheric reduction of the melting furnace together with tin bath temperature and the degree of annealing, as well as glass surface stability enhancement;
3. Improvement of transportation conditions and the storage environment;
4. Storage time reduction;
5. Use of appropriate surface treatment methods, such as anti-mold isolation powder spray or liquid spray.

Conditionally determined restrictions mean that points 1 to 4 listed above remain difficult to change. On the other hand, surface mildew treatment will be very direct, effective and easy to apply.

ABOUT BOST GROUP

Established in 2000, BOST is the earliest domestic manufacturer engaged in the R&D and industrialization of mildew-proof interleaving materials for glass. Today BOST's 20 product typologies are widely used in float glass sheets, ultra-white rolled glass sheets, online coated glass and various deep-processed glass. Its powders are suitable for different equipment, climate and conditions. With the Group's robust technical force and experienced professional industry technicians in the industry, it now gives assistance and participates in analysis whilst providing solutions for mildew phenomena, all of which accompanies its mildew-proof glass plan to address customer concerns. Each of BOST's products has passed inspection of the National Glass Testing Center and attained EU SGS certification. In China's domestic market today, more than 60 percent of float glass production lines and ultra-white calendering lines are using BOST products, and over 80 percent of high-end float glass lines are currently choosing BOST products. Not only. Their reputation is also growing further afield, gaining popular traction in such markets as Southeast Asia, Central Asia, the Middle East, Eastern Europe, Africa, South America and North America.

BOST GROUP

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