### **Tile & Stone Installation Systems**

# Removing grout haze



## **TECHNICAL BULLETIN 030116-TB**

A myriad of grout choices are available today for your tile and stone installations. Generally, grouts come in three types: cement-based, which can be sanded or unsanded; ready-mixed, which can be acrylic, urethane or a combination; and reaction-resin-based, which are epoxies. Other types exist, but these three are considered to be the most commonly used types in today's tile and stone installations. Each type has unique chemical properties that provide various levels of protection, durability, ease of use and areas of use as well as other characteristics and benefits.

Regardless of the type of grout used, there is always a chance that grout residue could dry on the surface, which can be quite challenging to remove even after the best cleaning procedures are used. Grout haze can appear as a white powder, dull smears, glossy patches, swirls, streaks, or any combination of the above. Grout haze is most commonly seen on textured tile surfaces, but it can also appear on smooth and polished tiles. Removing each type of grout haze requires products designed for removing each specific type of grout. What works for one type may not work on another, and knowing which product to use is essential to solving the problem.

#### How to remove cement grout haze

The residual haze left behind when using cement-based grout is predominately the cement portion of the mixture, which is composed of calcium-based materials. But cement grouts can also be modified with pigments for color and latex for strength, and those pigments and latex can also become attached and embedded into the tile surface, creating additional challenges for removal. Acid-based cleaners, such as MAPEI's *UltraCare* \*Cement Grout Haze Remover and *UltraCare* Acidic Tile & Grout Cleaner, are ideal for removing cement grout haze and are usually the first choice.

A word of caution about acid-based cleaners: They should only be used to remove cement grout residue on acid-resistant surfaces. Acids work by attacking calcium, breaking it down and dissolving it from the surface. This is evident by the obvious "sizzling" on the surface when acid comes into contact with calcium. Normally, pigments and latex come off with the cement during the acid rinsing; however, pigments and latex don't always break down with an acid wash and may need to be removed with other products more suitable for breaking them down.

If a mild acid wash doesn't completely remove the residue, using more acid may not do the trick and can also damage the surface. Consider using *UltraCare* Heavy-Duty Stone, Tile & Grout Cleaner or *UltraCare* Abrasive Surface Cleaner — or a combination of both — as excellent choices to help remove pigment and latex residues left behind from cement-based grouts.

#### How to remove ready-mixed grout haze

Today's ready-mixed grouts are convenient for the end user, as there is no mixing and very little waste when compared with use of cement-based grouts. Ready-mixed grouts are usually acrylic- or urethane-based, requiring special products to remove any residue successfully.

UltraCare Heavy-Duty Stone, Tile & Grout Cleaner and UltraCare Abrasive Surface Cleaner work in combination to remove these residues. UltraCare Heavy-Duty Stone, Tile & Grout Cleaner chemically breaks down the acrylic or urethane, and then UltraCare Abrasive Surface Cleaner helps to scrub off any organic or inorganic materials left behind without damaging the tile or stone.

Apply an undiluted amount of *UltraCare* Heavy-Duty Stone, Tile & Grout Cleaner and let it stand on the surface for several minutes. Then add an equal amount of *UltraCare* Abrasive Surface Cleaner to the area and scrub using a white scrubpad. The combination of these two products offers a "one-two punch" to effectively and efficiently remove embedded, synthetic residues left on the surface from ready-mixed grouts. *UltraCare* Epoxy Grout Haze Remover is also an effective alternative for removing haze left from ready-mixed grouts, but do not allow it to remain on the grout joint for more than 20 minutes, which could damage the grout.

#### How to remove epoxy grout haze

Epoxy grouts are made to withstand chemical exposure and typically repel staining. These characteristics are why epoxy grouts are chosen for use in many commercial restaurant kitchens and industrial factories. Because of the inherent bonding strength and strong chemical resistance of epoxy grout, haze from this type of grout can be the most difficult to remove. The longer the residue is allowed to dry onto the surface, the more difficult it can be to remove. Residential-grade (or non-industrial) epoxy grout is considered cured after about 7 days after installation. Industrial epoxy grouts can cure in as few as 4 days. Note: The curing time can vary quite a lot depending upon whether it is a non-industrial-grade or industrial-grade epoxy. MAPEI's Kerapoxy® and Kerapoxy CQ epoxy grouts fully cure in 14 days. Allow 4 days for Kerapoxy IEG CQ to fully cure.

For the reasons discussed above, epoxy grout haze should be addressed as soon after installation as allowed by the grout manufacturer. Consult the grout's Technical Data Sheet for details. *UltraCare* Epoxy Grout Haze Remover is a next-generation type of a more eco-friendly and easy-to-use product designed to remove epoxy grout haze. For best results, use *UltraCare* Epoxy Grout Haze Remover after the grout has dried at least 12 hours, but within the first 24 hours after the grout has been installed. Refer to *UltraCare* Epoxy Grout Haze Remover's Technical Data Sheet for details.



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