



Splash Series

Pool Furniture Cleaning Instructions & Suggestions for Removing Scale and Scum Also, Fixing Scratches

Scale (a.k.a. Calcium) and Scum build-up on in-pool furniture is an issue experienced by many pool owners. You will see scale and scum build-up at the water line on pool walls, ladders, in-pool umbrella pole, and in-pool furniture. You will also see scale and scum in pool mechanicals and filters.

Calcium and scum cleaning is the most frequently asked question we receive at Tenjam. This led Tenjam, a leader in pool furniture, to contact Orenda Technologies, a leader in pool chemistry, to talk through potential solutions for all pool owners. Listen to the “Rule Your Pool” podcast #162: Scale and Scum Lines on Pool Furniture:



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Fast forward to 7:33 in the podcast – Why scum lines and calcium scale forms on furniture

Fast forward to 14:46 in the podcast – Clean up and prevention

Reducing and Eliminating Scale

Scale: Scale buildup is calcium carbonate that solidifies on pool walls and surfaces. It’s usually white or tan in color with rough or gritty texture. Scale buildup is caused by imbalanced water, particularly from having water with high Total Hardness, high pH and/or Total Alkalinity.

Step #1 to reducing and eliminating scale: Download the Orenda App on your phone. You will find this in the App store under Orenda, Pool Calculator and Education. This is a free app.

Step #2: Learn about LSI (Langelier Saturation Index). The LSI is the objective measurement of water balance, based on the saturation of calcium carbonate (CaCO_3). Too much (high LSI) leads to scale, and too little (low LSI) leads to etching damage. LSI calculation is complex, the Orenda App helps you figure out how to get your pool chemistry into ideal balance of LSI. Achieving LSI balance is the key to reducing and eliminating scale.



Why do you see scale on in-pool furniture: materials in contact with the pool water, especially at the pool water line, are the most likely to develop scale buildup. Tile on pool walls, fiberglass pool walls/steps, pool ladders, umbrella poles, and in-pool furniture get hot in direct sunlight and creates an LSI violation that causes “high LSI” pool water to get rid of calcium on the surfaces that are hotter than the pool water. Most in-pool furniture is made with low to medium density polyethylene (LDPE & MDPE) and this material heats faster and easier than pool water, causing water to deposit calcium on these surfaces. Ideal LSI balanced water is less likely to deposit calcium on the higher temperature pool furniture.

Reducing and Eliminating Scum

Scum: Non-living organic waste, body oil, lotions, sunscreen, etc. This material floats on water and you’ll notice a sticky brown ring of scum on everything at the pool water line – pool walls, ladders, and in-pool furniture.

Scum Reduction Chemistry: Orenda Technologies CV-600 removes non-living organic waste from water and its filtration system. In swimming pools, non-living organics, oils, lotions, etc. are a primary source of oxidant demand on chlorine. CV-600 helps chlorine by breaking down and digesting those organics. Using CV-600 can drastically reduce the oxidant demand for chlorine, therefore improving ORP, improving water clarity and reducing chlorine demand. Consult your pool service technician or pool chemical supplier about Orenda CV-600 (or CV-700 Enzyme + Phosphate Remover) and reducing scum in your pool. This will reduce and potentially prevent scum from building up on your in-pool furniture. You’ll find additional information about Orenda CV-600 at this website: www.orendatech.com/orenda-products/cv-600

Scum Absorption Sponge: there are a variety of scum absorption products available that float on the pool surface and absorb scum. Check with your pool professional to see if this is a possible solution for you. However, we recommend pool chemistry solutions as a first measure to achieve scum reduction and prevention.

Removing Scale and Scum that has accumulated on in-pool furniture

Possible solutions to remove scale and scum from in-pool furniture while the furniture is in the pool:

- Plug the pool overflow valve and raise the water level above the affected area. Raising the water level about an inch above the affected scale/scum line. If you have your pool water chemistry in Ideal LSI Balance (see notes about scale and Orenda SC-1000 on previous page) this will work to break down the scale on the furniture and eventually remove it. This process may take a week

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or two to remove the scale from the furniture. Once your LSI is balanced and the scale is removed from the pool furniture you may go back to normal pool depth and maintain LSI balance going forward.

- During this process of raising the pool water and allowing the LSI balance to dissolve the scale, you may use a soft bristled brush or non-scratch sponge to lightly brush away the scale to speed the process of removal. Let the chemistry do the hard work and only use the brush or sponge lightly and occasionally, being careful not to scratch the furniture.
- Purge the pool with Orenda CV-600 to remove the scum during the process of scale removal. If scum is not an issue you may skip this step. If only scum is the issue in your pool, then skip the use of Orenda SC-1000 (if your pool is already in Ideal LSI Balance) and only use Orenda CV-600 for the scum removal. Using a non-scratch disposable rag to gently wipe away the scum from the furniture.
- This method of scale and scum removal is most effective when the water temperature is above 75F degrees.

Possible solutions to remove scale and scum from in-pool furniture that is removed from the pool:

- Mix a very diluted acid with Orenda CV-600 and apply with a non-scratch disposable rag. Rub softly for a few minutes and this should begin to break down the calcium and scum. The diluted acid will work against the scale and CV-600 works against the scum. 1:1 ratio.
- Or, instead of diluted acid you can use white vinegar mixed with Orenda CV-600. 1:1 ratio.
- Once the scale and scum are removed you should rinse the furniture before placing into your pool.
- Remember that LSI balance is the key to prevent scale from building again.

Other potential remedies from removing scale and scum:

- If trying other chemicals to remove scale and scum, be sure they are safe to use on low and medium density polyethylene (LDPE & MDPE). Polyethylene is a very common material used for chemical packaging and these plastic containers are often labeled with a #2 or #4 recycling symbol. Test these chemicals on the bottom of the furniture first. Never use a chemical packaged in a metal container on plastic/polyethylene furniture.
- CLR Brand cleaner (Calcium, Lime, Rust), and other scale (calcium) removing chemicals could be used to remove scale.
- Many degreasers work on scum removal. However, many degreasers have a chemical conflict with chlorine and should not be used on furniture while it is in the pool and should be rinsed from the furniture before placing the furniture back into the pool.
- We suggest using scale and scum removers formulated for use in swimming pools.



Stain Removal:

- Leaf stains and other stains on polyethylene are common and can be difficult to remove, especially if the leaves sat on the surface for a long time and the stain penetrates deep into the material.
- Choose a stain-removing chemical packaged in a polyethylene container, often marked with a #2 or #4 recycling symbol. Make sure the chemical is safe to use on polyethylene material and is non-scratch. Apply according to the manufacturer's instruction and follow the manufacturer's safety precautions. We suggest Krud Kutter Graffiti Remover or other graffiti remover chemicals safe to use on polyethylene.
- Try a sponge eraser with a stain removing chemical. Again, following manufacturer's instructions.
- Dawn dish soap, degreasers, and other cleaning products may also be used, but these are typically not effective in removing most stains.
- Always fully rinse chemicals off the furniture before placing them back into the pool to avoid chemical conflicts with chlorine and pool water chemistry.

Scratch Repair:

Watch this video hosted on YouTube about repairing scratches on polyethylene furniture:



← use your phone camera to open this video link