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STAINS 101

THE SCIENCE OF STAINS MADE SIMPLE

There are four basic types of stains on your boat, and each is removed using a different technology. Let *Stains 101* be your guide to understanding the science of stains. Discover how to properly identify and remove each of the four basic stains.

It's the science of stains, made simple.

SURFACTANT TECHNOLOGY

TO COMBAT

DIRT & GRIME

THE STAIN

Dirt, grime, gunk, muck. Fish blood, food, drinks. These are your surface stains.

THE SCIENCE

Most surface dirt will wash right off with boat soap and water. However, some gets ground in, especially on non-skid surfaces. That's where surfactants come in. Surfactant molecules fully surround the dirt molecules and lift them from the surface that you're cleaning. This allows them to be washed away with water. Chelating Agents are supercharged surfactants for specialized cleaning.

THE SOLUTION

Star brite Boat Wash will definitely remove most surface dirt. For tough grime and gunk, use a cleaner/degreaser, such as Star brite Xtreme Clean or choose a surfactant based on the surface: Non-Skid Deck Cleaner for non-skid, Vinyl Cleaner for vinyl, etc...



ACID TECHNOLOGY

TO COMBAT

RUST & TANNIC STAINS

THE STAIN

Tree leaves, hull stains, rust stains, waterline stains, hard water stains, orange stains.

THE SCIENCE

Tannins are naturally produced in the decomposition of plant-based matter, and their signature orange-hued stains are dyeing your hull and fiberglass. Rust stains occur on the fiberglass around metal, where water leaches color from underneath the metal and deposits it on the surface. Removing these stains requires a chemical reaction with an acid.

THE SOLUTION

Star brite Instant Hull Cleaner contains a modified oxalic acid that safely neutralizes tannins and rust. There's much more science behind it but trust us on this one, simply spray or wipe on and watch the stain disappear.



BLEACHING TECHNOLOGY

TO COMBAT

MOLD & MILDEW STAINS

THE STAIN

Black, brown, green, and even pink mold and mildew stains.

THE SCIENCE

Similar to grass stains, these stains are caused by organic material, and need something stronger than a surfactant alone to remove them. The oxygen in a bleaching agent attacks and breaks up these types of stains, and removes any discoloration.

THE SOLUTION

While most people believe that regular chlorine bleach is the answer, it also causes a lot of problems, such as breaking down fabrics and stitching and destroying gelcoats. Instead use Star brite Mildew Stain Remover—a buffered bleach formula—that attacks the stain without harming the surface.



ABRASION TECHNOLOGY

TO COMBAT

SCUFF MARKS

THE STAIN

Black shoe marks, rub rail and bumper scuffs, marks left from dragging hoses and equipment.

THE SCIENCE

Scuff marks—or "transfer stains"—happen when material is transferred onto a surface and is mechanically bonded. Chemicals are rarely strong enough to remove these marks, since many times the material that has transferred is chemical-resistant (think of a rubber shoe). These abrasive marks require the same to remove them: abrasion.

THE SOLUTION

Star brite Ultimate Magic Sponge uses nano-sized scrubbers to grab hold and erase most marks easily. For your hull, use Premium Cleaner Wax to buff the stain away.



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