



BOATER GUIDE TO ECO-FRIENDLY PURCHASING

LOOK FOR •Biodegradable
•Non-aerosol •Low or no-VOC*
• Water-based • Soy-based
• Derived from natural sources
• Eco-label certifications such as Green Seal, EcoLogo, EPA Design for the Environment

USE the least amount of product required, clean more frequently to avoid heavy build-up & exert more elbow grease

Cleaner : Shower

✗ Ethyl alcohol⁵ • sodium hypochlorite • glycol ethers
✓ Baking soda • salt²

Cleaner : Teak

✗ Phosphoric acid•(bleach)sodium hypochlorite • sodium hydroxide
✓ Oxalic acid • biodegradable soap to remove dirt & salt water¹ • instead of bleaching, try using a mild powder soap & scrub w/ bronze wool¹

Cleaner : Rug/Upholstery

✗ Bromides • triclosan • 2-phenyl phenol • acrylic acid hypochlorite • sulfuric acid • para-dichlorobenzene⁵
✓ Dry corn starch; vacuum¹

Cleaner : Varnish

✗ Xylene • ethylbenzene • PD
✓ Wipe with ½ c. vinegar & ½ c. water solution²

*VOC= Volatile Organic Compound
Products w/ VOCs should comply w/ California VOC regulations

✗ Avoid these ingredients known to be toxic to humans and/or the environment

✓ Try these alternatives

Cleaner : Bilge

✗ Soap¹ • solvents • degreasers • TCE • PERC • MeCl
✓ Veg-based • biodegradable

Cleaner : Brake

✗ Hexane • toluene • PERC• MeCl
✓ Non-aerosol • water-based

Cleaner : Degreaser

✗ Chlorinated solvents • benzene • sodium hydroxide • phosphates• butoxyethanol • PERC • NMP • PD • MeCl
✓ Water-,citrus-,or soy-based • non-aerosol• lemon juice&borax¹

Remover : Fiberglass

✗ Xylene • ethylbenzene • PD
✓ Baking soda & water¹•oxalic acid

Remover : Adhesive / Graffiti / Stain

✗ Benzene • Ethylbenzene • PD • xylene • MeCl • NMP • MEK • toluene
✓ Non-aerosol • ethyl lactate • citrus or soy-based • acetone • methyl lactate • methyl acetate

Remover : Rust

✗ TCE • hexane • MeCl • PD • PERC³ • phosphoric acid
✓ Oxalic acid

Remover : Mildew

✗ Phosphate •sodium hypochlorite
✓ Scrub with paste of equal parts lemon juice (or vinegar) & salt² • full strength vinegar, then rinse¹ • scrub mildew w/ borax & water using a nylon scouring pad¹

Cleaner: Detergent /Soap

✗ Phosphates • phosphoric acid • sodium hypochlorite (bleach) • chlorinated solvents • PD • APE • quaternary ammonia • lye •
✓ Fresh water & a lot of elbow grease² • biodegradable • phosphate-free • vegetable or citrus-based soaps¹ • hydrogen peroxide²

Cleaner : Dish

✗ 2-bromo-2-nitropropane-1,3-diol (bronopol) • oxybenzone • hypochlorite • sulfuric acid • nitric acid • ethyl alcohol • triclosan • propylene glycol⁵
✓ Vegetable-based¹ • citric acid

Cleaner : Drain

✗ Sodium hydroxide
✓ Disassemble & replace • flush with a mixture of boiling water, ¼ c. baking soda & ¼ c.vinegar¹ • enzymes • citrus extract⁵ • biodegradable

Paint : Anti-fouling / Hull

✗ Dibutyl phthalates • tributyltin • zinc pyrithione • ethylbenzene • xylene • copper (cuprous oxide)
✓ Epoxy• non-biocide • silicone

Paint : Stripper / Remover

✗ MeCl • NMP • PCBTF
✓ Sodium bicarbonate (soda) blasting • vacuum sanding

Paint : Thinner / Reducer

✗ PD • toluene • xylene
✓ Water or soy- based • acetone

Paint : Topside, Interior, Primer, Wood Coating

✗ MeCl • TCE • benzene • xylene • toluene¹ • ethylbenzene • MEK• hexane • heavy metals i.e. lead, chromate, chromium VI, cobalt,
✓ Water based • low VOC

Adhesive

✗ Ethylbenzene • hexane • toluene • xylene • benzene

Cleaner : Floor

✗ Sodium hypochlorite (bleach) • APE • sodium hydroxide• chlorinated solvents • phosphoric acid
✓ Vegetable or citrus-based soaps
✓ Fresh water & a lot of elbow grease² • hydrogen peroxide² phosphate-free • biodegradable

Cleaner : Glass

✗ Glycol ethers³
✓ 1c.vinegar :1 qt warm water²

Cleaner : Head

✗ Hypochlorite • formaldehyde
✓ Brush w/ baking soda²
✓ active-oxygen-based sprays • ½ c. borax : 1 gal of water¹

Cleaner : Holding Tank

✗ Formaldehyde • ammonium chloride • isopropyl alcohol (isopropanol)• 2-propanol •
✓ Bio-active⁴ • nitrates • enzymes
✓ Biodegradable • fragrance-free

✓ (Adhesive cont.) water-based²

Anti-freeze

✗ Ethylene glycol
✓ Propylene glycol³ • recycled antifreeze³

Solvent

✗ Ethylbenzene • hexane • toluene • MEK • xylene • MeCl
✓ Water- or soy-based • ethyl lactate • methyl esters

Wood Polish / Preservative

✗ Pentachlorophenol (PCP) • creosote • tributyltin • folpet¹
✓ Water-based •shellac,tung,olive, linseed,walnut,or almond oil^{1,2} • 3:1 olive oil to white vinegar²

ONLINE RESOURCES

- 1 www.coastal.ca.gov/ccbn/toolkit/marina-toolkit.pdf
- 2 www.dbw.ca.gov/Pubs/CleanBoatingHabits/Default.aspx
- 3 www.sfapproved.org
- 4 www.westmarine.com >West Advisor
- 5 www.GoodGuide.com

Cleaner : Hull

✗ Phosphoric acid • APE
✓ Oxalic acid

Cleaner : Metal

✗ Chlorinated solvents • NMP strong caustics • hexane • PERC • butoxyethanol • PD
✓ Brass: Worcestershire sauce, or paste made of equal parts salt, vinegar, & water¹ • Chrome: plain or apple cider vinegar to clean; baby oil to polish² • Or, use soap & water; then dry very well⁹ • Stainless Steel: baking soda or mineral oil for polishing, vinegar to remove spots¹ • Copper: lemon juice & water, or paste made of equal parts lemon juice, salt, & flour¹ • Aluminum: 2tbsp cream of tartar: 1 qt of water²

Cleaner : Scouring Powder

✗ Sodium hypochlorite (bleach)
✓ Peroxide • wet surface & use scouring cloth w/ baking soda²

LEGEND

APE alkyl- or nonylphenol ethoxylate
MeCl methylene chloride, dichloromethane
MEK methyl ethyl ketone, 2-butanone
NMP n-methyl 2-pyrrolidone
PCBTF perchlorobenzotrifluoride
PD petroleum distillates, naphtha, mineral spirits, kerosene,Stoddard Solvent
PERC perchloroethylene, tetrachloroethylene
TCE trichloroethylene

If you have questions, contact:
virginia.stjean@sfdph.org

Created in partnership by:
CA Dept. of Toxic Substances Control
San Francisco Dept of Public Health
CA Dept. of Boating and Waterways



Cleaner : Shower	
✗	Ethyl alcohol ⁵ • sodium hypochlorite • glycol ethers
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✗	Bromides • triclosan • 2-phenyl phenol • acrylic acid hypochlorite • sulfuric acid • para-dichlorobenzene ⁵
✓	Dry corn starch; vacuum ¹
Cleaner : Varnish	
✗	Xylene • ethylbenzene • PD
✓	Wipe with ½ c. vinegar & ½ c. water solution ²

Remover : Fiberglass	
✗	Xylene • ethylbenzene • PD
✓	Baking soda & water ¹ • oxalic acid
Remover : Adhesive / Graffiti / Stain	
✗	Benzene • Ethylbenzene • PD • xylene • MeCl • NMP • MEK • toluene
✓	Non-aerosol • ethyl lactate • citrus or soy-based • acetone • methyl lactate • methyl acetate
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✗	TCE • hexane • MeCl • PD • PERC ³ • phosphoric acid
✓	Oxalic acid
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✗	Ethylene glycol
✓	Propylene glycol ³ • recycled antifreeze ³
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NMP	n-methyl 2-pyrrolidone
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PD	petroleum distillates, naphtha, mineral spirits, kerosene, Stoddard Solvent
PERC	perchloroethylene, tetrachloroethylene
TCE	trichloroethylene

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