

Chemical Resistance Guide

Duramax Building Products, a division of US Polymers Inc. | 1057 S Vail Ave, Montebello, CA 90640 | 213-652-7665 | duramaxpvcpanels.com | Revision 1.0

Rating	What it means	Rating	What it means
E — Excellent	No significant effect from normal splash, spray, or wipe-down contact.	F — Fair	Incidental contact only. Wipe up and rinse immediately. Extended contact may cause softening, staining, or gloss loss.
G — Good	Suitable for normal splash or wash-down contact. Rinse after use; do not let the chemical pool or dry on the surface.	N — Not Recommended	Do not allow contact. May cause softening, swelling, crazing, or permanent damage.

Basis and limits of this guide

Item	What it means	Item	What it means
Material covered	Rigid PVC panel surface only. Not sealants, adhesives, fasteners, trims, or the substrate behind the panel.	Source of data	General published compatibility data for rigid PVC plus field experience. Panels have not been individually tested against every chemical. A guide, not a test report.
Contact type	Splash, spray, and wash-down contact followed by rinsing. Not immersion, continuous contact, or chemicals left to dry.	Before relying on it	Spot test first. For chemicals not listed, or listed chemicals at higher concentration or temperature, call 213-652-7665.
Temperature	Room temperature, about 73°F. Drop one rating level for warm solutions. Anything above the 120°F maximum service temperature is unsuitable regardless of chemistry.	Warranty	Not a warranty. The Limited Lifetime Warranty covers manufacturing defects and excludes damage from chemical exposure or improper cleaning.
Concentration	Ratings apply at the concentration stated. Where a product is normally diluted, the rating assumes label dilution.	Questions	Call 213-652-7665 or email sales@duramaxpvcpanels.com before you order. We would rather answer up front than have the wrong material on your wall.

Most important item on this list: never use acetone or any acetone-containing product on Duramax panels. That includes many brake cleaners, carburetor cleaners, nail polish removers, and lacquer thinners. Acetone attacks rigid PVC and the damage is permanent.

1. Cleaning, sanitizing and disinfecting

Chemical or product	Rating	Notes	Chemical or product	Rating	Notes
Mild detergent (dish or laundry soap)	E	Routine cleaning	Ammonia and ammonium hydroxide	E	Never mix with bleach
Trisodium phosphate (TSP) solution	E	Heavy soil. Rinse after use	Alkaline degreaser, use dilution	G	Rinse after use
Quaternary ammonium disinfectant, use dilution	E	Recommended. Follow label directions	Citric acid	E	
Sodium hypochlorite (bleach), sanitizing dilution	E	Recommended. Rinse after contact time	Acetic acid (vinegar), 5%	E	
Sodium hypochlorite, undiluted or above 10%	F	Limited contact. Rinse immediately	Phosphoric acid descaler, 1 to 5%	E	
Hydrogen peroxide, 3 to 10%	E		Enzymatic cleaner	E	
Peracetic acid, use dilution	G	Dairy and brewery sanitizer. Rinse after use	Phenolic disinfectant	F	May stain or dull. Rinse promptly
Iodophor sanitizer, use dilution	G	May stain if left to dry	Pine oil cleaner	F	Rinse promptly
Isopropyl alcohol, 70%	G	Spot disinfection. Avoid prolonged saturation	Melamine foam pad (Magic Eraser type)	G	Fine abrasive. Light pressure; spot test first
Ethyl alcohol, 70%	G		Abrasive scouring powder or pad	N	Scratches the surface. Mechanical, not chemical
Sodium hydroxide (caustic soda), 1 to 25%	E	Common CIP cleaner	Solvent-based graffiti remover	N	See Section 7
Potassium hydroxide	E				

2. Automotive, garage and dealership

Chemical or product	Rating	Notes	Chemical or product	Rating	Notes
Motor oil	E		Carburetor and throttle body cleaner	N	
Gear oil and transmission fluid	G	<i>Wipe up. Avoid pooling</i>	Lacquer thinner	N	
Antifreeze, ethylene glycol	E		Mineral spirits and paint thinner	G	<i>Splash only. Wipe up</i>
Antifreeze, propylene glycol	G		Battery acid (sulfuric, 20 to 40%)	E	
Diesel fuel and fuel oil	E		Automotive wax and polish	E	
Gasoline	G	<i>Splash only. Wipe up promptly</i>	Silicone tire dressing	E	
Brake fluid, DOT 3 and DOT 4	F	<i>Wipe up immediately</i>	Penetrating oil (WD-40 type)	G	
Brake cleaner, chlorinated	N	<i>Attacks the panel surface</i>	Windshield washer fluid (methanol)	G	
Brake cleaner, acetone based	N	<i>Attacks the panel surface</i>	Undercoating, solvent based	F	<i>Wipe overspray before it cures</i>

3. Car and truck wash

Chemical or product	Rating	Notes	Chemical or product	Rating	Notes
Alkaline presoak, use dilution	E		Drying agent and rinse aid	E	
Acidic presoak / low pH cleaner, use dilution	G	<i>Rinse thoroughly</i>	Spray wax and protectant	E	
Foaming detergent and soap	E		Bug and tar remover, solvent based	F	<i>Limited contact. Rinse immediately</i>
Triple foam conditioner	E		Road salt and brine	E	
Wheel cleaner, acid type	G	<i>Rinse. Do not let dry on the panel</i>	Reclaimed wash water	E	

4. Food processing, beverage and dairy

Chemical or product	Rating	Notes	Chemical or product	Rating	Notes
Caustic clean-in-place solution	E		Vegetable and cooking oils	E	
Acid clean-in-place solution, dilute	E		Brine and salt solutions	E	
Nitric acid, up to 50%	G		Sugar and syrup solutions	E	
Lactic acid	E		Fruit acids and juices	E	
Milk, whey and dairy residues	E		Blood and protein soils	E	
Beer, wort and brewing residues	E		Smokehouse residues	G	<i>Clean before residues bake on</i>
Wine and must	E		Food-grade lubricant, mineral oil based	E	
Animal fats and rendered oils	E				

5. Agriculture, grow rooms and animal facilities

Chemical or product	Rating	Notes	Chemical or product	Rating	Notes
Animal urine and manure	E		Insecticidal soap	E	
Ammonia from animal waste	E		Sulfur burner residue	F	<i>Ventilate and rinse. Corrosive with moisture</i>
Liquid fertilizer and nutrient solution	E		Kennel disinfectant, quat based	E	
Hydrogen peroxide sterilant, 3 to 10%	E		Kennel disinfectant, phenolic based	F	
pH up and pH down solutions, dilute	E		Footbath solution (copper or zinc sulfate)	E	
Potassium silicate	E		Formaldehyde-based disinfectant	F	
Horticultural and neem oil	G		Teat dip, iodine based	G	<i>May stain if left to dry</i>

6. Pool, marina and water treatment

Chemical or product	Rating	Notes	Chemical or product	Rating	Notes
Chlorinated pool water	E		Salt water and salt chlorinated water	E	
Calcium hypochlorite, dry or dilute	G		Algaecide, quat based	E	
Muriatic acid (hydrochloric), up to 35%	G		Marine and diesel fuel	E	
Sodium bisulfate (dry acid)	E		Bottom paint and antifouling solvents	N	See Section 7
Cyanuric acid	E				

7. Not recommended: keep these off the panel

Chemical or product	Rating	Notes	Chemical or product	Rating	Notes
Acetone	N	Most important on this list. In many cleaners	Toluene	N	
Methyl ethyl ketone (MEK)	N		Xylene	N	
Diethyl ketone and other ketones	N		Ethyl benzene	N	
Cyclohexanone	N		Nitrobenzene	N	
Ethyl acetate	N		Aniline	N	
n-Butyl acetate and amyl acetate	N		Acetaldehyde	N	
Tetrahydrofuran (THF)	N		Carbon disulfide	N	
Methylene chloride (dichloromethane)	N	Common in paint strippers	Phosphate ester hydraulic fluid (Skydrol type)	N	Aviation fluid. Not compatible with rigid PVC
Chloroform	N		PVC primer and solvent cement	N	Dissolves rigid PVC by design
Carbon tetrachloride	N		Paint stripper and graffiti remover	N	
Trichloroethylene and trichloroethane	N		Sulfuric acid, 98%	N	
Perchloroethylene	N	Dry cleaning solvent	Concentrated oxidizing acids generally	N	
Ethylene chloride	N		Turpentine	F	Incidental contact only. Wipe up at once
Benzene	N		Hexane and heptane	F	Incidental contact only

8. Acids, alkalis and other chemicals

Chemical or product	Rating	Notes	Chemical or product	Rating	Notes
Sulfuric acid, up to 60%	E		Aluminum hydroxide	E	
Hydrochloric acid, 1 to 5%	E		Ammonium oxalate	E	
Hydrochloric acid, up to 35%	G		Glycerine	E	
Nitric acid, 70%	F		Ethylene glycol	E	
Phosphoric acid, up to 85%	E		Propylene glycol	G	
Chromic acid	E		Hydrogen	E	
Boric acid	E		Propane gas	E	
Benzoic acid, saturated	E		Chlorine, dry gas	E	
Butyric acid	G		Zinc salts and stearates	E	
Formic acid, 50%	G		Tartaric acid	E	
Formic acid, 90 to 100%	F		Sulfur salts	N	
Hydrofluoric acid, up to 48%	G		Sulfur dioxide, liquid	F	
Perchloric acid	G				

