

Chemical Resistance of KYDEX[®] Thermoplastic Sheet

For information applicable to KYDEX[®] FST please refer to 300 series technical briefs.

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Introduction

From sulfuric acid to brake fluid to carbon tetrachloride, KYDEX[®] thermoplastic alloy is more resistant to a wider range of concentrated chemicals than any other thermoplastic. All grades of KYDEX[®] sheet meet the highest standards of chemical resistance for thermoplastic materials. A listing of the more common chemicals that KYDEX[®] sheet is resistant to is listed below.

General Information

If you need information on the resistance of KYDEX[®] sheet to a specific chemical or substance, please call the KYDEX Technical Service Line for further assistance.

Chemical or Substance	Resistance
30% Hydrofluoric Acid	No Change
63% Pechloric Acid	No Change
50% Pechloric Acid	No Change
10% Hydrochloric Acid	No Change
30% Sulfuric Acid	No Change
3% Sulfuric Acid	No Change
70% Nitric Acid	No Change
50% Nitric Acid	No Change
30% Nitric Acid	No Change
10% Nitric Acid	No Change
10% Citric Acid	No Change
5% Acetic Acid	No Change
10% Citric Acid	No Change
Oleic Acid	No Change
10% Sodium Hydroxide	No Change
1% Sodium Hydroxide	No Change
10% Ammonium Hydroxide	No Change
2% Sodium Carbonate	No Change
100% Potassium Hydroxide	No Change
Skydrol Hydraulic Fluid	Attacked
Motor Oil	No Change
Brake Fluid	No Change
Coffee	No Change
Gasoline	No Change
10% Hydrochloric Acid	No Change

Chemical or Substance	Resistance
10% Sodium Chloride	No Change
3% Hydrogen Peroxide	No Change
95% Ethyl Alcohol	No Change
50% Ethyl Alcohol	No Change
Acetone	Attacked
Ethyl Acetate	Attacked
Ethylene Dichloride	Attacked
Carbon Tetrachloride	Very Slightly Whitened
Toluene	Attacked
Heptane	No Change
Tichloroethylene	Attacked
Lube Oil MIL-0-5606	No Change
Lube Oil MIL-L-7808	No Change
Lube Oil MIL-L-23699	No Change
ASTM Oil No. 3	No Change
Jet Fuel JP-4	No Change
Jet Fuel JP-5	No Change
Water	No Change
Propylene Glycol	No Change
Perchloroethylene	Attacked
Transmission Fluid	No Change
Ammonia	No Change
Lestoil	No Change
Isopropyl Alcohol	No Change



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Customer Service

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KYDEX[®] Sheet vs. FR-ABS

KYDEX[®] sheet meets Class 12454-C rigid PVC chemical resistance requirements per ASTM D-1784.

Chemical and Stain Resistance to Potable Liquids, Cleaners, Polishes, Detergents, etc. after 30 Days Contact

Material	Chemical Resistance 23°C / 73°F	Chemical Resistance 60°C / 140°F	Staining Tendency 23°C / 73°F	Staining Tendency 60°C / 140°F
Wesson Oil	No Change	No Change	None	None
Mazola Corn Oil	No Change	No Change	None	Slight
Coppertone Suntan Oil	No Change	No Change	None	Slight
Skol Suntan Oil	No Change	No Change	None	Medium
Lestoil	No Change	Slight Attack	None	Slight
Simoniz Wax	No Change	No Change	Very Slight	Medium
Household Ammonia	No Change	Slight Attack	None	Slight
All [®] Detergent	No Change	No Change	None	Slight
Exxon Gasoline	No Change	--	Very Slight	--
Mennen Skin Bracer	No Change	--	None	--
Tomato Juice	No Change	No Change	Very Slight	Medium
Prune Juice	No Change	No Change	Very Slight	Medium
Orange Juice Concentrate	No Change	No Change	Very Slight	Slight
Coffee	No Change	No Change	Very Slight	Medium
Bright Sail Bluing	No Change	No Change	Medium	Medium
Johnson's Pride	No Change	No Change	None	Slight
Isopropyl Alcohol	No Change	--	None	--
Cold Cream, Pond's	No Change	No Change	None	Slight
Butter	No Change	No Change	None	Slight
Mayonnaise	No Change	No Change	None	Slight
Mustard	No Change	No Change	Slight	Medium
Grape Juice	No Change	No Change	Slight	Slight
Clorox	No Change	No Change	None	Slight
Rinso Blue	No Change	No Change	None	Slight
Easy Monday Bluing	No Change	No Change	Medium	Medium
Pepsi-Cola	No Change	No Change	None	Slight
Water	No Change	No Change	None	Slight



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This information supersedes all previously published data.