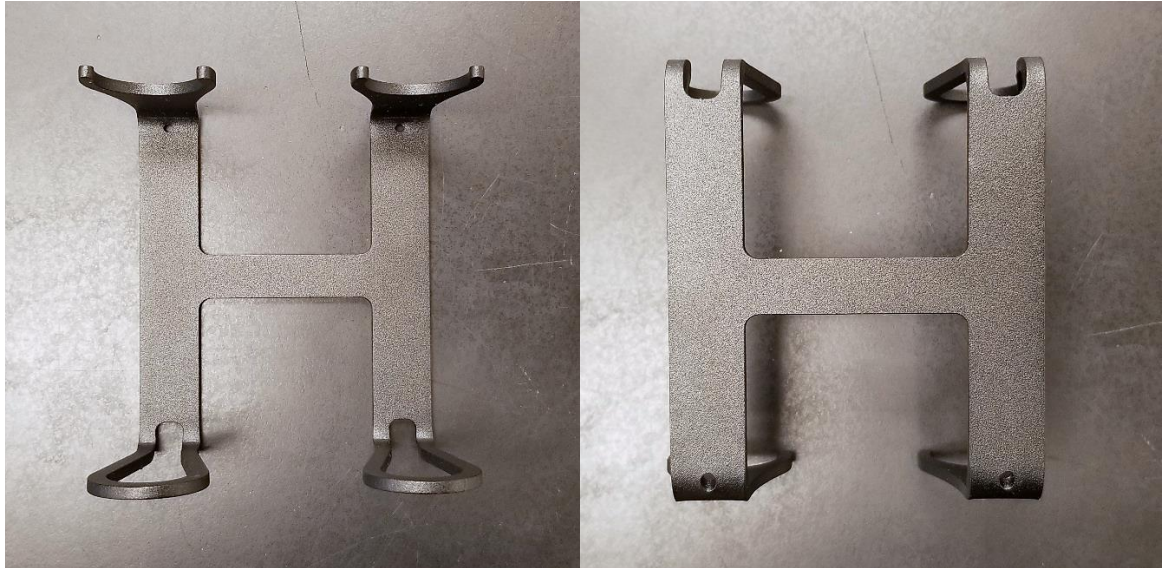


Technical Service Report

Chemical compatibility with cleaning products

Background

One metal bracket was submitted to a technical service laboratory. Spaza requested analysis to determine the chemical compatibility with commonly used cleaning products. Found below are images of the sample and a table outlining sample details.



Spaza sample, stainless steel powder coated

Testing and results

Spot Testing: The submitted bracket was tested for compatibility with various cleaning products. The products were applied to the surface and were allowed to remain in contact for 4 hours and 24 hours. The sample was inspected after each time interval for any changes (damage/discoloration). A description of the products used, concentration, and results can be found below.

- Scrub Free Bathroom Cleaner and Disinfectant – 4 oz./gal and 6 oz./gal.
- Disinfecting Acid Bathroom Cleaner – 8 oz./gal and 12 oz./gal.
- Heavy Duty Alkaline Bathroom Cleaner and Disinfectant – 8 oz./gal and 12 oz./gal.
- Peroxide Multi Surface Cleaner and Disinfectant – 4 oz./gal and 6 oz./gal.
- DI Water - Control

Test Solution	Results After 4 Hours	Results After 24 Hours
	Use Dilution	Use Dilution
Scrub Free Bathroom Cleaner and Disinfectant (4 oz./gal)	Circular discoloration	Circular discoloration
Scrub Free Bathroom Cleaner and Disinfectant (6 oz./gal)	Circular discoloration	Circular discoloration
Disinfecting Acid Bathroom Cleaner (8 oz./gal)	No change	No change
Disinfecting Acid Bathroom Cleaner (12 oz./gal)	No change	No change
Heavy Duty Alkaline Bathroom Cleaner and Disinfectant (8 oz./gal)	No change	Faint circular discoloration
Heavy Duty Alkaline Bathroom Cleaner and Disinfectant (12 oz./gal)	No change	Faint circular discoloration
Peroxide Multi Surface Cleaner and Disinfectant (4 oz./gal)	No change	No change
Peroxide Multi Surface Cleaner and Disinfectant (6 oz./gal)	No change	No change
DI Water	No change	No change



Images of the discolorations

Conclusion

The surface finish of bracket withstand cleaning using common cleaning products. The faint discoloration appears due to extreme conditions. All powder coated products should be cleaned at least every 6-12 months with either a soft cloth or a brush using a solution of mild soap and warm water. Do not under any circumstances use strong solvents such as thinners or solutions containing chlorinated hydrocarbons, esters or ketones. Abrasive cleaners or cutting compounds should not be used.