Coating Chemical Compatibility Guide

✓ Successful Coating

C Contact SilcoTek for Clarification

X Not Successful Coating

Chemicals (Room Temp.)		Silco-		_		
		(SilcoNert [®] , SilcoKlean [®] , SilcoGuard [®])	Silcolloy®	Dur- (Dursan [®] & Dursox [®])	Notak®	Siltride [®]
Acetic Acid	$C_2H_4O_2$	\checkmark	\checkmark	\checkmark	С	\checkmark
Acetone	C₃H ₆ O	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Ammonia	NH_3	С	С	С	С	С
Ammonium Fluoride	NH ₄ F	С	С	С	Х	С
Ammonium Hydroxide	NH₄OH	С	С	С	Х	С
Argon	Ar	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Arsine	AsH ₃	\checkmark	\checkmark	\checkmark	С	\checkmark
Boron Tribromide	BBr ₃	\checkmark	\checkmark	\checkmark	С	\checkmark
Boron Trichloride	BCl ₃	\checkmark	\checkmark	\checkmark	С	\checkmark
Carbon Dioxide	CO ₂	\checkmark	\checkmark	\checkmark	\checkmark	
Carbon Tetrafluoride	CF ₄	\checkmark	\checkmark	\checkmark	\checkmark	
Chlorine			\checkmark	\checkmark	С	√
Dichloromethane	CH ₂ Cl ₂	\checkmark	\checkmark	\checkmark	\checkmark	~
Disilane	Si ₂ H ₆	\checkmark	\checkmark	\checkmark	С	
Helium	He	\checkmark	\checkmark	\checkmark	\checkmark	
Hexafluoroethane	C_2F_6	\checkmark	\checkmark	\checkmark	\checkmark	
Hexamethyldisilazane	C ₆ H ₁₉ Si ₂ N			\checkmark	С	\checkmark
Hydrochloric Acid* (5%)	HCI			\checkmark	Х	
Hydrochloric Acid* (18%)	НСІ	Х		\checkmark	Х	
Hydrochloric Acid* (37%)	НСІ	Х	С	С	X	С
Hydrofluoric Acid	HF	С	С	С	Х	С
Hydrogen	H ₂			\checkmark	\checkmark	\checkmark
Hydrogen Bromide**	HBr	С		\checkmark	Х	
Hydrogen Peroxide	H ₂ O ₂	С	√	С	С	С
Hydrogen Sulfide	H ₂ S	C	С	C	X	С
Isopropyl Alcohol	C ₃ H ₈ O	V	V	V	\checkmark	
Methanol	CH ₃ OH	√	√	√	√	√
Nitric Acid	HNO ₃	 √	V	√	C	۰ ا
Nitrogen	N ₂	, √	√ √	· √	√	√
Nitrogen Trifluoride	NF ₃	C	C	C	X	√
n-Methyl 2-Pyrrolidone	C₅H ₉ NO	√	√	√	√	√
Octafluorocyclobutone	$C_5 \Pi_9 NO$ $C_4 F_8$	√	√ √	√ √	√	 √
Oxygen		√	√	√ √	√	√
Ozone	0 ₂	√ √	√ √	√	C	 √
	O ₃	√	√	√	C	√
Phosphine Phosporic Acid	PH₃ H BO	√ √	√ √	√	C	√ √
Phoshoric Acid Phosphoric Oxychloride		C	√ √	C	X	C
		x	X	C C	×	C
Potassium Hydroxide	KOH	 √	√	√		√
Silane	SiH ₄	 √	√ √	√		 √
Sulfur Hexafluoride	SF ₆	C	C	C	X	C
Sulfuric Acid		C C	C C	C C	X	
Tungsten Hexafluoride	WF ₆	√	√	√	× √	C √
Water	H₂O	 √	√ √	 √	 √	√ √
DI Water	H ₂ O	N	N	N	N	N

* Based on 24-hour exposure data.

** Based on 264-hour exposure data.



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