

## APPENDIX 1

### **Materials compatibility with peroxyacetic acid solutions up to 17 %**

General rule: Assume incompatibility unless otherwise established.

Material	Rating @ 25°C	Comments
Stainless steel (304L, 316, 316L, 316Ti)	A	see notes below
Aluminium 99.5 %	A/B	slight pitting, see notes below
Mild steel	C	general corrosion
Copper / brass	C	incompatible
All other metals	C	incompatible unless tests prove otherwise
ABS	C	
Acrylonitrile butadiene	C	
Butyl rubber	C	
Chloroprene	C	
EPDM	B/C	softened, tacky
Ethylene propylene rubber	C	
Fluoroelastomer (VITON®)	B	performance varies with grade
Hypalon	B/C	blistering
Natural rubber	C	
Neoprene	C	
Nitrile rubber	C	
Polyethylene	B	service life depends on temperature and grade
Polyphenylene sulphide	B	slight cracking at edges
Polypropylene	B	cracking on bending
PTFE	A	
PVC	B	
PVDF	A	
Silicone rubber	B	bleached and slightly rigid
Styrene butadiene	C	

**Notes:**

- Ratings are subject to suitable fabrication, pickling and passivation by Solvay approved methods.
- Peroxyacetic acid solutions may be destabilised by materials rated as A after protracted periods of continuous contact at elevated temperatures e.g. > 3 months at  $\geq 35^{\circ}\text{C}$ .

#### **Ratings:**

- Recommended material having acceptable corrosion rates/rates of degradation and minimal effects on peroxyacetic acid solution stability.
- Material has limited resistance to peroxyacetic acid solution or requires further testing.
- Material is considered to be unsuitable for use with peroxyacetic acid solution.

For further information or detailed technical documentation, please contact your local Solvay Interlox office. (See the complete list of addresses on the opposite page).

© 1999, Solvay S.A.  
 Responsible editor: Solvay S.A.  
 Photography: Solvay, Y. Glavie, ARGO  
 Concept and creation: ARGO N.V., Belgium  
 Printed in Belgium

"All information in this document is deemed to be accurate by Solvay at the time of going into press. It is given in good faith. All regulations, at the national or local level, regarding safety and health in the work place and environmental protection are always to be applied but Solvay disclaims liability for any failure in this document to comply with the above. Freedom of use under existing patents or other intellectual property rights must be duly considered before use."