

Appendix G

Materials of Construction and Compliant Solvents



Warning: To avoid possible excessive leakage of solvent into the laboratory atmosphere, you must address any safety issues raised by the contents of this Appendix.

G.1 Items Exposed to Solvent

The items detailed in Table G-1 may be exposed to solvent; you must evaluate the safety issues involved if the solvents used in your application differ from the solvents normally used with these items. See Section G.2 for details of the most common ingredients used to prepare mobile phases.

Table G-1 Items Exposed to Solvent

Item	Material
O-rings	Viton or PTFE-encapsulated Viton
Gas tubes	PTFE
Ion block	Stainless steel
Ion block support	PEEK
Corona discharge pin mounting contact	PEEK
Gas exhaust port	Aluminium
Isolation valve	Gold-plated aluminium/bronze
Push-in gas fittings	Nickel/brass
Source enclosure	Alochromed aluminium
Source enclosure view port	Toughened plate glass
Probe adjustment flange	Anodized aluminium, glass filled acetal, and stainless steel

Table G-1 Items Exposed to Solvent (Continued)

Item	Material
Probe shaft	PEEK
Probe adjuster bellows	PTFE
Waste bottle	Polypropylene

G.2 Common Ingredients Used to Prepare Mobile Phases

The following lists the most common ingredients used to prepare mobile phases for reverse-phase LC/MS (API):

- Water
- Methanol
- Acetonitrile
- Formic acid (<0.1%)
- Acetic acid (<0.1%)
- Trifluoroacetic acid (<0.1%)
- Ammonium acetate (<10 mM)
- Ammonium formate (<10 mM)

These solvents are not expected to cause any problems with the materials identified in Section G.1.