

# Probe Compatibility Matrix

The C Technologies, Inc. Spectroscopy Products Line contains many offerings ranging from fiber optic probes to fully integrated systems. Our fiber optic probes are used in many different applications across numerous industries under a wide range conditions. Given the virtually unlimited variables, comprehensive testing is neither practical nor possible, so in order to provide guidance to our customers on the compatibility of our probe products, C Technologies uses a component level compatibility approach. The various styles of probe designs are typically assembled from common set of materials. By educating our customers on the properties of the material used, the degree of exposure to the customer samples and the test environment, we assist our customer in making informed decisions on the appropriateness of a given product for use in their application. For specific applications, custom or specialized probes can be designed and built to comply with customer specified requirements.

Commonly Used Materials		Acids – Weak	Acids-Strong	Bases – Weak	Bases – Strong	Aromatic Carbons	Alcohols	Ketones / Ethers
Table Legend								
●	Highly Compatible	◐	◑	◒	◓	◔	◕	◖
◑	Compatible	◒	◓	◔	◕	◖	◗	◘
○	Incompatible	◕	◖	◗	◘	◙	◚	◛
?	Unknown	◙	◚	◛	◜	◝	◞	◟
316 Stainless Steel	316SS	○	○	●	●	●	●	●
Quartz/Silica	QS	●	●	●	●	●	●	●
Torlon	TRL	●	◑	◑	○	●	●	●
PEEK	PK	●	●	●	●	●	●	●
Reinforced Jacket (PVC Over Steel)	PVC	●	◑	●	●	●	●	○
Epoxy	EPX	●	●	●	●	?	●	●
PTFE – Teflon	TEF	●	●	●	●	●	●	●
Aluminum	ALM	○	○	◑	○	◑	●	◑

## Standard Fiber Optic Probes and Tips

Part Number	SKU #	Description	Primary Materials <i>Direct Exposure</i>	Secondary Materials <i>Internal / No Exposure</i>
7910035600	FA-VAR00-AP0N	Micro-Probe	<b>316SS + QS + EPX</b> -50 °C to 200 °C	<b>PVC + TEF</b> -20 °C to 65 °C
7910035700	FA-VAR00-AP0X	S.S. Replaceable Tip Probe	<b>316SS + QS + EPX</b> -50 °C to 200 °C	<b>PVC + TEF</b> -20 °C to 65 °C
7910036000 7910035900 7910035800 7910036100	FA-VAR00-OA0H FA-VAR00-OA0J FA-VAR00-OA0G FA-VAR00-OA0M	2 mm SS Replaceable Tip 5 mm SS Replaceable Tip 10 mm SS Replaceable Tip 40 mm SS Replaceable Tip	<b>316SS + QS + EPX</b> -50 °C to 200 °C	<b>None</b>
7910032600	FA-VAR00-AP06	Torlon Replaceable Tip Probe	<b>TRL + QS + EPX</b> -50 °C to 200 °C	<b>PVC + TEF + ALM</b> -20 °C to 65 °C
7910032800 7910032900 7910033000 7910034600 7910034500	FA-VAR00-OA05 FA-VAR00-OA04 FA-VAR00-OA0F FA-VAR00-OA07 FA-VAR00-OA08	2 mm Torlon Replaceable Tip 5 mm Torlon Replaceable Tip 10 mm Torlon Replaceable Tip 20 mm Torlon Replaceable Tip 40 mm Torlon Replaceable Tip	<b>TRL + QS + EPX</b> -50 °C to 200 °C	<b>None</b>
7910030300	FA-VAR00-AP08	Quartz Probe	<b>QS</b> -50 °C to 200 °C	<b>TRL+EPX+PVC+TEF+316SS</b> -20 °C to 65 °C
7910035500	FA-VAR00-FB02	Reflectance Probe	<b>316SS + QS + EPX</b> -50 °C to 200 °C	<b>PVC + TEF</b> -20 °C to 65 °C
7910043100	FA-VAR00-AP14	Fluorescence Probe	<b>316SS + QS + EPX</b> -50 °C to 200 °C	<b>PVC + TEF</b> -20 °C to 65 °C

\*This information provided is not intended to be a certification for use and is merely general guidance on material compatibility. Customers are encouraged to research and test the suitability of the product for their application thoroughly where uncertainty exists prior to use.