



# Chemical Resistance of Polymer Insulated Cables

Thermon polymer insulated heat tracers have an overjacket covering the braid. This overjacket is intended to be a chemical corrosion barrier for the braid and also provide additional mechanical strength.

For what chemicals do -OJ and -FOJ overjackets offer protection? This Technical Bulletin is intended to answer these questions.

In general for BSX, the polyolefin overjacket (-OJ) is suitable for mild acids, mild bases, and aqueous solutions. If an exposure to solvents, hydrocarbons, strong acids, or strong bases may occur, a fluoropolymer -FOJ overjacket is recommended.

Due to their higher temperature capabilities, process temperature maintenance heat tracers such as HTSX, VSX, and HPT have a fluoropolymer overjacket. The overjacket (-OJ) on these tracers offer maximum chemical resistance protection.

The following Table shows chemical groups that the (-OJ), and (-FOJ) overjackets provide protection. Chemical resistance is not limited to the examples shown; these are intended to show representative types of chemicals where resistance is provided.

In all cases, chemical resistance is based on incidental exposure. Thermon does not recommend long term exposure of heat tracing products to these or any other chemicals.

**Chemical Resistance of Outer Jackets**

	Acids dilute or weak	Acids strong and conc.	Alcohols, aliphatic	Alde-hydes	Bases	Esters	Hydro-carbons, aliphatic	Hydro-carbons, aromatic	Hydro carbons halogen-ated	Ketones	Oxidizing agents, strong
<b>BSX/RSX-OJ</b>	√	NR	NR	NR	√	NR	NR	NR	NR	NR	NR
<b>BSX/RSX-FOJ</b>	√	√	√	√	√	√	√	√	√	√	NR
<b>HTSX/VSX/KSX HPT TEK/HTEK (all -OJ)</b>	√	√	√	√	√	√	√	√	√	√	√

√ = OK for incidental exposure

NR = Not Recommended - avoid exposure to these chemicals