

Regarding effects on mixed refrigerant polymer material

Compatibility with motor materials

PET (polyethylene terephthalate) film

(130°C x 7 days)

	R-410A POE	R-407C POE	R-404A POE	R-507A POE	R-22 Mineral oil
Oligomer extractability [%]	0.2	0.2	0.1	0.1	0.2
tensile strength change [%]	-9	-7	-7	-7	-13
Elongation change ratio [%]	-7	-17	-12	-12	-8

Enameled wire (esterimide/amideimide coated enamel wire) (150°C x 7 days)

	R-410A POE	R-407C POE	R-404A POE	R-507A POE
Crazing	None	None	None	None
Blister	None	None	None	None
Pencil Hardness	6H	6H	6H	6H

Initial pencil hardness: 6H

Oligomer extractability: Ratio of low polymers (oligomer) extracted from high polymer resin

Crazing: Fine cracks that appear when immersed in refrigerant after applying stress to the membrane

Blister: Refrigerant absorbed in membrane becomes membrane bubbles caused by rise in temperature