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(54) Title: TRIAZINE CONTAINING FLUOROPOLYETHER ELASTOMERS HAVING VERY LOW GLASS TRANSITION TEMPERATURES, COMPOSITIONS CONTAINING THEM AND METHODS OF MAKING THEM

(57) Abstract: A method of making a fluoropolyether elastomer containing triazine groups and having a glass transition temperature of less than -40 °C, including providing (i) one or more saturated fluoropolyethers containing repeating moieties selected from (-C₃F₈O-), (-C₃F₆O-), (-C₂F₄O-), (-CF₂O-) and combinations thereof and further containing at least one functional group at a terminal carbon atom of the backbone chain, or of a side chain if present, wherein the terminal carbon atom may be a primary or secondary carbon atom and wherein the functional group is capable of reacting with a functional group of the fluorinated compound according to (ii) below to form a triazine ring, (ii) one or more fluorinated compound containing at least one perfluorinated alkyl or perfluorinated alkylene moiety wherein the carbon atoms of the perfluorinated alkyl or alkylene moiety may be interrupted by one or more oxygen atoms and wherein the fluorinated compound further contains at least one functional group capable of reacting with the functional group of the one or more fluoropolyethers to form a triazine; curing the components according to (i) and (ii) to form triazines. Further provided are cured compositions, articles comprising the cured compositions and methods of making articles.

