What is claimed is:

1. A foam bead formed from a composition comprising one or more polyolefin interpolymers, wherein the foam bead has a gel content of higher than or equal to 80%, and a tanδ at 1 rad/s of lower than or equal to 0.11.

2. The foam bead according to claim 1, wherein the one or more polyolefin interpolymers comprise a polyolefin elastomer.

3. The foam bead according to claim 1, wherein no less than 70 wt% of the one or more polyolefin interpolymers is silane-grafted.

4. The foam bead according to claim 3, wherein the silane-grafted polyolefin interpolymer has a silane grafting ratio of higher than 0.3 wt%, based on the total weight of the silane-grafted polyolefin interpolymer.

5. The foam bead according to claim 1, wherein the foam bead is formed from the composition by crosslinking the pellets of the composition prior to foaming the pellets.

6. A method for producing polyolefin foam beads, comprising,

(a) providing a composition comprising one or more polyolefin interpolymers;

(b) pelletizing the composition to form pellets;

(c) crosslinking the pellets to a gel content of higher than or equal to 80%; and

(d) foaming the crosslinked pellets into foam beads,

wherein the foam beads has a tanδ at 1 rad/s of lower than or equal to 0.11.

7. The method of claim 6, wherein the one or more polyolefin interpolymers comprise a polyolefin elastomer, wherein no less than 70 wt% of the one or more polyolefin interpolymers is silane-grafted.

~~8. The method of claim 6, wherein no less than 70 wt% of the one or more polyolefin interpolymers is silane-grafted.~~

~~9~~8. The method of claim ~~8~~7, wherein the silane-grafted polyolefin interpolymer has a silane grafting ratio of higher than 0.3 wt%, based on the total weight of the silane-grafted polyolefin interpolymer.

~~10~~9. The method of claim 6, wherein the one or more polyolefin interpolymers are selected from the group consisting of one or more ethylene/α-olefin multi-block interpolymers, one or more ethylene/α-olefin random copolymers, and any combination thereof.

~~11~~10. The method of claim 6, wherein the one or more polyolefin interpolymers have a melt index (MI) of from 0.1 g/10 min to 30 g/10 min.

~~12. An element prepared from a plurality of the foam beads according to claim 1, comprising a cavity filled with the foam beads.~~

~~13. A product comprising the element according to claim 12.~~

~~14. Use of the foam beads according to claim 1 in bead-filling applications.~~