CLAIMS

1. A composition comprising:

60 parts per hundred parts rubber (phr) to 90 phr of a halobutyl rubber; and

10 phr to 40 phr of an elastomer composition,

wherein the halobutyl rubber comprises a halogenated isobutylene-isoprene copolymer,

wherein the elastomer composition comprises a copolymer comprising:

a C_4 to C_7 isoolefin;

a non-halogenated alkylstyrene; and

a halogenated alkylstyrene,

wherein the non-halogenated alkylstyrene and the halogenated alkylstyrene cumulatively are present in the elastomer composition in the amount of 3 wt% to 15 wt% based on the elastomer composition; and

wherein the halogenated alkylstyrene is present at from 0.1 mol% to 2 mol% relative to the non-halogenated alkylstyrene.

2. The composition of claim 1, wherein the elastomer composition further comprises:

a diolefin, wherein the C_4 to C_7 isoolefin is not the same as the diolefin.

3. The composition of claim 2, wherein the diolefin is isoprene, butadiene, cyclopentadiene, or combinations thereof.

4. The composition of claims 2-3, wherein the diolefin is present in the elastomer composition in the amount of less than or equal to 10 wt% based on the elastomer composition.

5. The composition of any preceding claim, wherein the C_4 to C_7 isoolefin is halogenated.

6. The composition of any preceding claim, wherein the non-halogenated alkylstyrene is p-methylstyrene.

7. The composition of any preceding claim, wherein the composition has a glass transition temperature of -39 ºC to -32 ºC

8. The composition of any preceding claim further comprising:

processing aid;

curative; and

filler.

9. A process to make the composition of claims 1-8, comprising the steps of:

a. polymerizing in a first reactor the C_4 to C_7 isoolefin, the non-halogenated alkylstyrene, the halogenated alkylstyrene, optionally the diolefin, and optionally the isobutylene-p-methylstyrene to produce the elastomer composition;

b. polymerizing in a second reactor monomers of the halobutyl rubber to produce the halobutyl rubber; and

c. optionally combining the elastomer composition, the halobutyl rubber, optionally the processing aid, optionally the curative, and optionally the filler.