Although the phenyl content of RTV 655 was selected to give optimum flexibility at very low temperatures for other applications, it has sufficient phenyl content to give optical clarity when used with fume silica filler to be comparable to the optical clarity of hydrogel soft contact lenses. Another advantage of RTV 655 is its commercial availability.

EXAMPLE 5

Several silicone oils of varying phenyl-methyl contents were mixed in pairs in equal proportion. It was found that several pairs of oils were not miscible. The least miscible pairs of oils were those with the greatest mismatch of phenyl contents.

The miscible pairs are designated by *m* in the table below. These oils are commercially available from Dow Corning Corporation. The refractive indices (*n*, shown below) are proportional to their phenyl content.

	Mole % Ph	DC 710	DC 550	DC 203	DC 230	DC 560	DC 510	DC 200
DC 710 n=1.533	47	m	m					
DC 550 n=1.4935	15	m	m		m	m		
DC 203 alkyl—aryl n=1.4659	—			m				
DC 230 n=1.4615	—		m		m	m		
DC 560 chloro phenyl n=1.4360	16		m		m	m	m	m
DC 510 n=1.425	2.6					m	m	m
DC 200 all dimethyl n=1.4025	0					m	m	m

EXAMPLE 6

RTV 615 Part A (0% phenyl) and RTV 655 Part B (6% phenyl) were mixed together in a ratio of 10:1 by weight, respectively, and no filler. The mixture reacted to form an elastomeric mass but it was not transparent because the components were not sufficiently miscible. RTV 655 Part A (6% phenyl) and RTV 615 Part B (0% phenyl), were mixed together in a ratio of 10:1 by weight, respectively, and no filler. This mixture also cured to an elastomeric mass but was not transparent.

Poor miscibility was the result of poor matching of the phenyl contents of the respective polymers and caused the lack of transparency. Examples 5 and 6 indicate the importance of all liquid components of a silicone resin mixture having similar phenyl contents to have good miscibility and demonstrate the effect of miscibility on transparency.

In the main, silicone resins containing both phenyl and methyl groups in such proportions that the copolymer has a refractive index which matches that of a silica filler are used to obtain optically clear materials suitable for intraocular implants, lenses and, in particular, contact lenses.

I claim:

1. An optically clear, reenforced vulcanized silicone elastomer comprising 80 to 95% by weight of

a. a copolymer comprising
   i. dimethyl siloxane,
   ii. diphenyl siloxane, or phenylmethyl siloxane or mixtures thereof, and
   iii. vinyl siloxane;

b. a copolymer comprising
   i. dimethyl siloxane,
   ii. diphenyl siloxane or phenylmethyl siloxane or mixtures thereof, and
   iii. siloxane having $(R)_2HSiO$—or —O—SiH-R—O—

   groups, or both, wherein R is methyl or ethyl; with the proviso that each of fractions (a) and (b) has 6 to 16 mole percent phenyl and each contains no Part (iii) of the other;

c. 5 to 20% of a silica filler, the refractive index of said copolymer being substantially the same as the index of refraction of (c).

2. An optically clear reenforced vulcanized silicone elastomer according to claim **1** wherein R is methyl, (c) is fume silica, group (b) (iii) is R_2HSiO— and the index of refraction of an elastomer of (a) and (b) is about 1.43 to 1.47.

3. An optically clear, reenforced vulcanized silicone elastomer according to claim **1,** wherein there are 100 parts by weight of the copolymer (a) comprising about 0.3 mole percent of vinyl siloxane, 6 mole percent of diphenyl siloxane and the remainder being dimethyl siloxane; 10 parts by weight of copolymer (b) comprising 1 to 2 mole percent of —O—SiH $(CH_3)_2$ units, about 6 mole percent diphenyl siloxane, and the remainder being dimethyl siloxane, and about 11 parts by weight of fume silica filler.

4. A contact lens molded from the silicone elastomer as defined in claim **1.**

5. An ocular implant molded from the silicone elastomer as defined in claim **1.**

6. A contact lens molded from the silicone elastomer as defined in claim **3.**

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