



Siltech LLC

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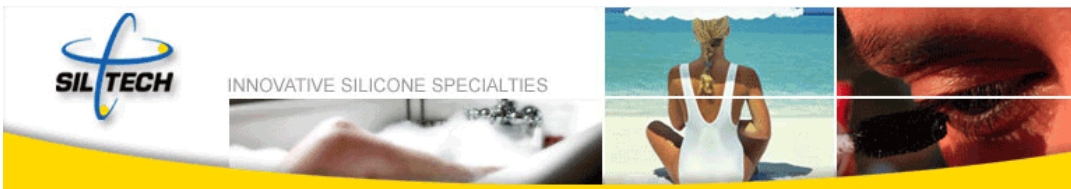
(678) 442-9624 (fax)

Formulator Friendly®

REACTIVE INTERMEDIATES

Background

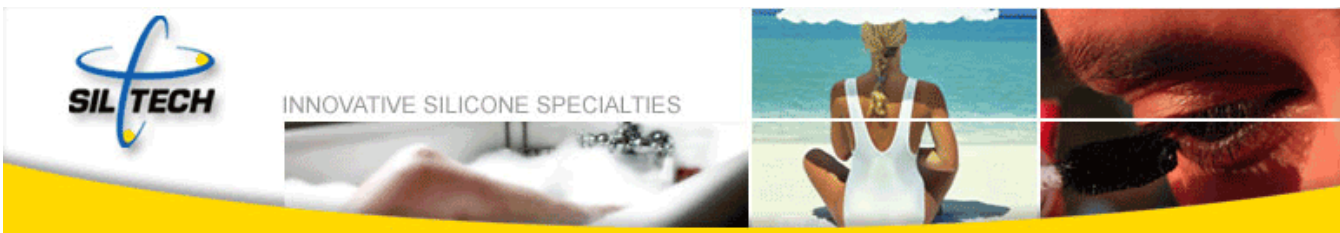
Realizing that personal care companies have become more sophisticated in the type of products that are used, Siltech has made available a variety of silicone compounds that can be used as raw materials for the preparation of new molecules. Their structure and equivalent molecular weight are provided. The products can be used to coat pigments, or to react (with other raw materials to make new molecules or with substrate like non-woven fabrics, hair or skin). This type of material allows for the formulation of many new unique classes of compounds.



1.Silmer OH

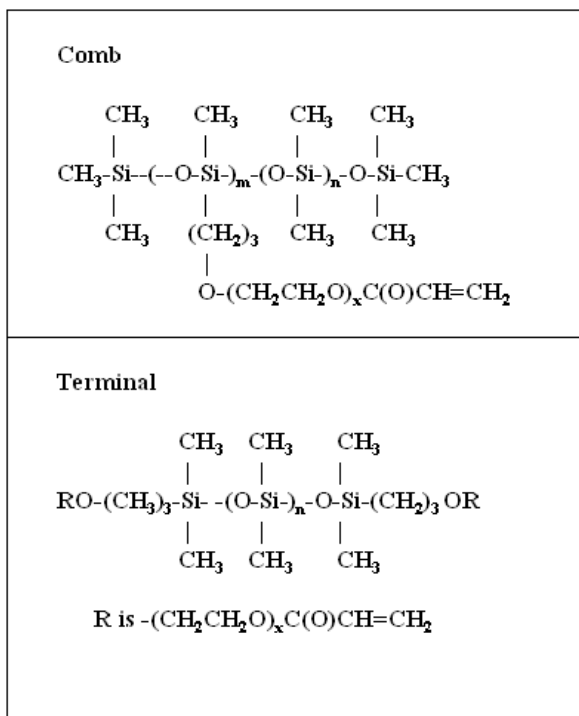
Silicone Compounds with Hydroxyl Groups
<p>Comb</p> $ \begin{array}{cccc} \text{CH}_3 & \text{CH}_3 & \text{CH}_3 & \text{CH}_3 \\ & & & \\ \text{CH}_3\text{-Si-} & \text{-(O-Si)-} & \text{(O-Si)-} & \text{O-Si-CH}_3 \\ & & & \\ \text{CH}_3 & \text{(CH}_2\text{)}_3 & \text{CH}_3 & \text{CH}_3 \\ & & & \\ & \text{OH} & & \end{array} $
<p>Terminal</p> $ \begin{array}{cccc} \text{CH}_3 & \text{CH}_3 & \text{CH}_3 & \\ & & & \\ \text{HO-(CH}_2\text{)}_3\text{-Si-} & \text{-(O-Si)-} & \text{O-Si-(CH}_2\text{)}_3 & \text{OH} \\ & & & \\ \text{CH}_3 & \text{CH}_3 & \text{CH}_3 & \end{array} $

Products	Properties & Applications	Appearance	Mol. Wt.	Equivalent Wt.
Silmer OH AO (Comb)	Lowest-molecular-weight reactive silicone. Contains one reactive group on a heptamethyltrisiloxane backbone. Used as a chain terminator and polymer modifier.	Clear Liquid	280	280
Silmer OH C50 (Comb)	High molecular weight trifunctional silicone pre-polymer.	Clear Liquid	11,600	3,800
Silmer OH J10 Comb	High molecular weight multi-functional silicone pre-polymer.	Clear Liquid	8,800	880
Silmer OH Di-50 Terminal	Linear difunctional hydroxyl-terminated silicone pre-polymer	Clear Liquid	4,000	1,980
Silmer OH Di-100 Terminal	Linear difunctional hydroxyl-terminated silicone pre-polymer. Twice the molecular weight of Silmer OH Di-50	Clear Liquid	7,700	3,800

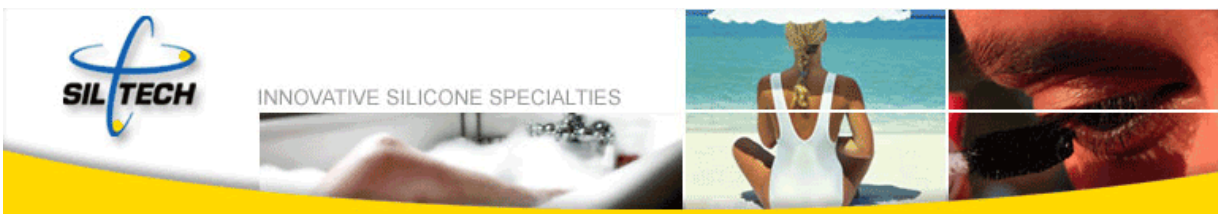


2. Silmer ACR

Silicones with acrylate functional groups.

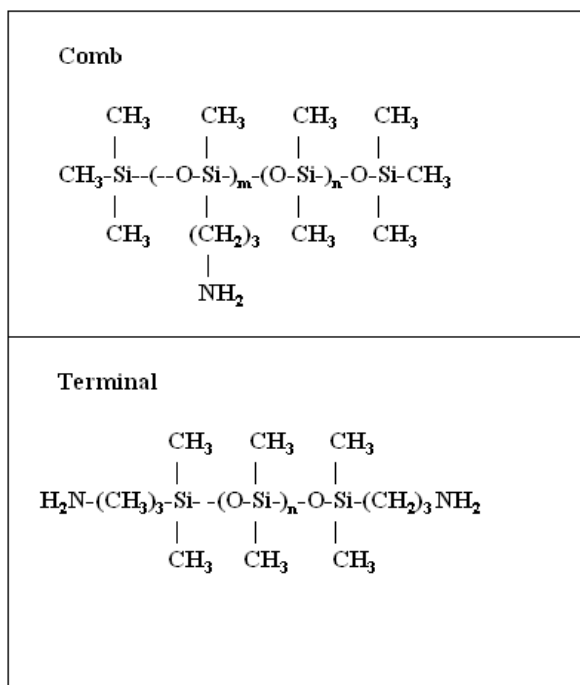


Products	Properties & Applications	Appearance	Mol. Wt.	Equivalent Wt.
Silmer ACR D208	Water-soluble multi-functional acrylate silicone pre-polymer.	Clear Liquid	2,200	1,400
Silmer ACR D2	Multi-functional acrylate silicone pre-polymer.	Clear Liquid	1,790	700
Silmer ACR 2110	Fluorinated multi-functional acrylate silicone pre-polymer.	Clear Liquid	2,700	900
Silmer ACR Di-50	Linear difunctional acrylate-terminated silicone pre-polymer.	Clear Liquid	4,100	2,050
Silmer ACR Di-100	Linear difunctional acrylate-terminated silicone pre-polymer. Twice the molecular weight of Silmer ACR Di-50	Clear Liquid	7,800	3,900
Silmer ACR Di-1508	Linear difunctional water dispersible acrylate Silicone pre-polymer	Clear Liquid	2,100	1,050

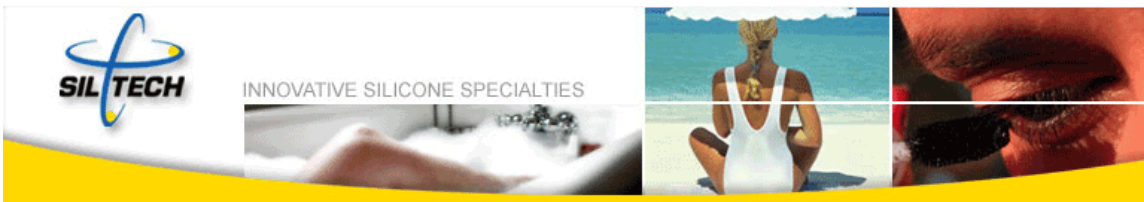


3. Silmer NH Di-8

Silicone compounds with amino functional groups.

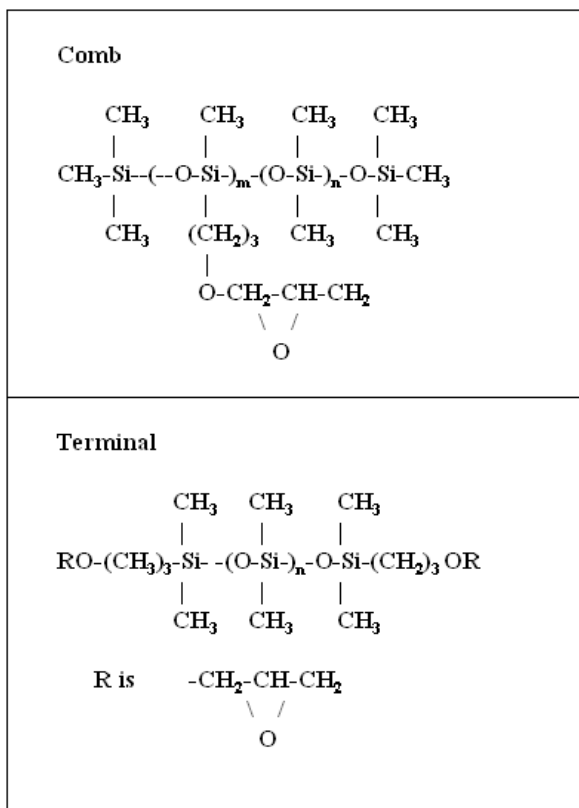


Products	Properties & Applications	Appearance	Mol. Wt.	Equivalent Wt.
Silmer NH Di-8	Linear difunctional amino-terminated silicone pre-polymer.	Clear Liquid	850	425
Silmer NH Di-50	Linear difunctional amino-terminated silicone pre-polymer.	Clear Liquid	3,600	1,800

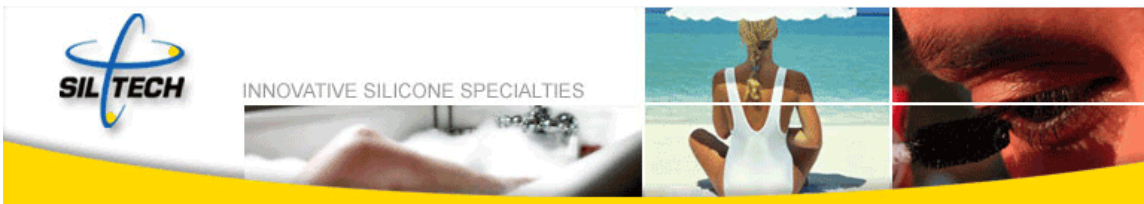


4. Silmer EP

Silicone with epoxy functional groups.

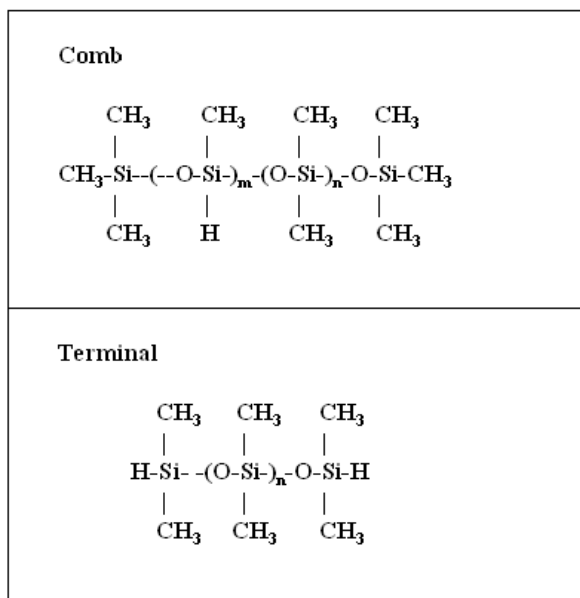


Products	Properties & Applications	Appearance	Mol. Wt.	Equivalent Wt.
Silmer EP C50	High-molecular-weight trifunctional silicone pre-polymer.	Clear Liquid	11,800	3,900
Silmer EP J10	High-molecular-weight multi-functional silicone pre-polymer.	Clear Liquid	9,300	930
Silmer EP Di-50	Linear difunctional epoxide-terminated pre-polymer.	Clear Liquid	4,100	2,050
Silmer EP Di-100	Linear difunctional epoxide-terminated silicone pre-polymer. Twice the molecular weight of Silmer EP Di-50	Clear Liquid	7,800	3,900

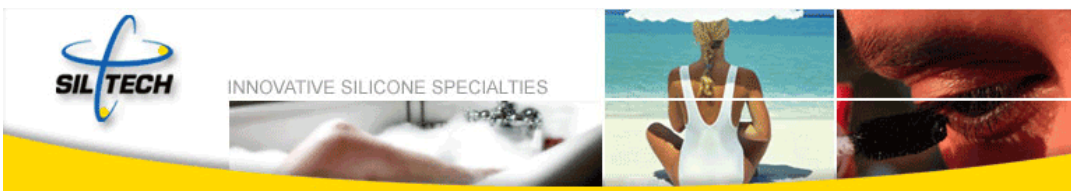


5. Silmer H

Silicone with silanic hydrogen functionality

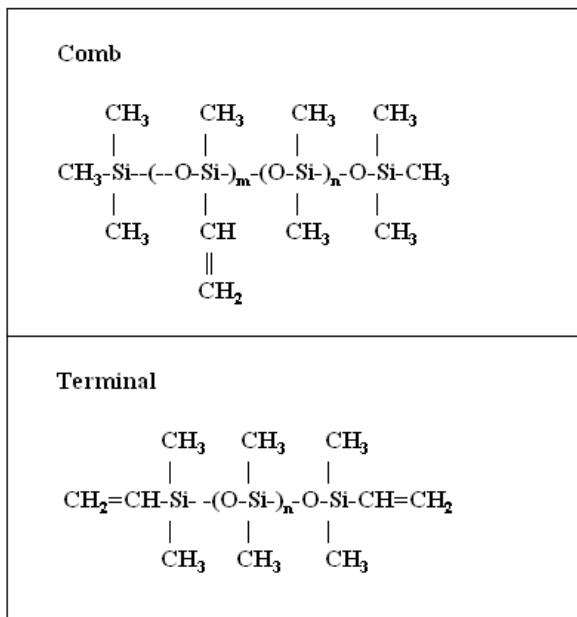


Products	Properties & Applications	Appearance	Mol. Wt.	Equivalent Wt.
Silmer H D2	Multi-functional silicone hydride pre-polymer.	Clear Liquid	1,100	270
Silmer H E4	Multi-functional silicone hydride pre-polymer.	Clear Liquid	2,100	420
Silmer H Di-10	Linear di-functional silicone hydride pre-polymer.	Clear Liquid	875	438
Silmer H Di D2	Linear di-functional and multi-functional silicone hydride pre-polymer.	Clear Liquid	1,050	260

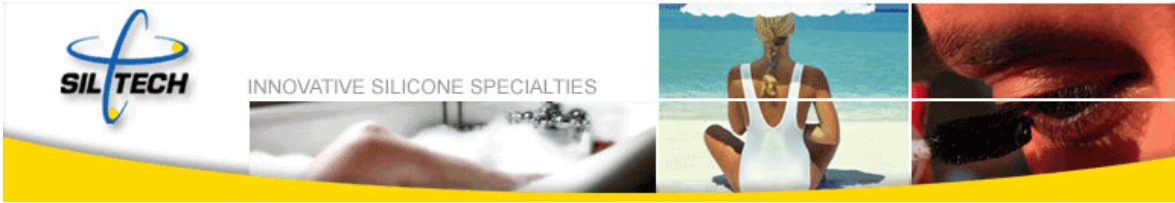


6. Silmer VIN

Silicone with vinyl functionality.



Products	Products & Applications	Appearance	% Vinyl	Vinyl mmoles/gm
Silmer VIN C50	High-molecular-weight trifunctional silicone pre-polymer.	Clear Liquid	0.701	0.260
Silmer VIN J10	High-molecular-weight multi-functional silicone pre-polymer.	Clear Liquid	3.190	1.182
Silmer VIN 70		Clear Liquid	1.390	0.514
Silmer VIN 100		Clear Liquid	0.882	0.327
Silmer VIN 200		Clear Liquid	0.500	0.185
Silmer VIN 1000	Linear Di-functional vinyl-terminated silicone pre-polymers with viscosities ranging from 70-65,000 cps.	Clear Liquid	0.250	0.0925
Silmer VIN 5000	Please refer to Silmer H cross-linkers for hydride silicones as part of our silicone line.	Clear Liquid	0.115	0.0426
Silmer VIN 10000		Clear Liquid	0.100	0.0370
Silmer VIN 20000		Clear Liquid	0.080	0.0296
Silmer VIN 65000		Clear Liquid	0.050	0.0185



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