



## Maxillofacial Silicone

Arzu Atay\*

Department of Prosthodontics, Gulhane Military Medical Academy Haydarpaşa, Training Hospital, Turkey

Silicon is a polymers and containing silicon, oxygen and various hydrocarbons. There are so many varieties of silicones in terms of molecular weight and structure. Simple silicone fluids, although it is thin and transparent, long-chain and branched structure is quite viskous silicones. Elongation under tensile force showing a very high rate and the first length of the rotating force is removed instantly from cross-linked rubbery polymer or rubbery network structures in other words is called elastomer [1]. The most important feature of these elastomers, contained entirely of molecular structures due to the low cross-linking density reticulated structure. Polizopiren elastomers are most commonly used and known (or natural rubber), polybutadiene, polyisobutylene, and polyurethane. Maxillofacial silicone elastomers used to be treated as a prosthetic treatment such as have occurred subsequently damaged or lost as a result of a face, accident, trauma, cancer surgery, or congenital defects. Prostheses used for this purpose a positive effect on the patient's quality of life by providing aesthetic they had lost. Physical and chemical properties of silicone elastomers are

often cross-links, or elastomer network structure depends on the type of filling materials [2]. In addition, thermal initiators, other additions, the polymerization time and temperature, and hence the useful life of such factors affects the strength of the silicon material. Physical properties of maxillofacial silicone elastomers was tried strengthening using coloring agents, glass and silica fibers, ceramic fibers, or carbon fibers cellular block silica [3]. However, the addition of controlled amounts of these materials are needed. Otherwise it may adversely affect the physical properties.

### References

1. <http://silikon.nedir.com/>
2. <http://polimernedir.com>
3. Karayazgan SB (2010) Evaluation of the Physical Properties of Maxillofacial Silicone Elastomers Reinforced with Silica. *Cumhuriyet Dental Journal* 13: 66-73.

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**\*Corresponding author:** Arzu Atay, Associate Professor, Department of Prosthodontics, Gulhane Military Medical Academy Haydarpaşa, Training Hospital, Turkey, Tel: 00905053992373; E-mail: [arzuatay@gmail.com](mailto:arzuatay@gmail.com)

**Received** November 20, 2013; **Accepted** November 21, 2013; **Published** November 22, 2013

**Citation:** Atay A (2013) Maxillofacial Silicone. *J Powder Metall Min* 2: e124. doi:[10.4172/2168-9806.1000e124](http://dx.doi.org/10.4172/2168-9806.1000e124)

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