

USP CLASS VI ELASTOMERS

Amherst, NH - February 17, 2025

USP Class VI elastomers are bio-compatible with human tissue. They have low levels of extractables and chemicals that can migrate from a material at elevated temperatures or with surface exposure. Applications for USP Class VI elastomers include molded diaphragms, gaskets, tubing, o-rings, cable jacketing, and other components for medical devices and equipment. USP Class VI testing ensures the absence of toxic species which may migrate from the elastomer and cause adverse health events.

Diacom has two elastomers that meet the USP Class VI testing requirements. One is a silicone elastomer and the other is an EPDM elastomer. These materials are also formulated with FDA approved ingredients. The materials are currently used by Diacom in a variety of molded and rolling diaphragms both fabric reinforced and all rubber configurations. These diaphragms are used in medical, pharmaceutical and the food/beverage industries. Applications include: artificial heart pumps, kidney dialysis machines, oxygen concentrators, oxygen conservers, air regulators, beverage dispensing valves, milk and juice packaging equipment, food packaging equipment, and many other applications.

Physical property information for both our USP Class VI EPDM compound and UPS Class VI Silicone compounds is shown below:

EH-5025	
Durometer (shore A +/- 5)	50
Specific Gravity (+/- 0.02)	1.23
Tensile Strength (psi min)	1,015
100% Modulus (psi min)	450

EC-6508	
Durometer (shore A +/- 5)	64
Specific Gravity (+/- 0.02)	1.16
Tensile Strength (psi min)	1,998
100% Modulus (psi min)	368
Elongation (% min)	472



(Values are not intended for use in preparing specifications. Please contact Diacom Corporation prior to writing specifications based on this material.)

Diaphragm Design & Manufacturing Leader

DiaCom Corporation, an ISO 9001 and AS9100 certified company, is a recognized leader in the design, manufacture and application of innovative, high performance molded diaphragm seals. DiaCom serves a variety of markets worldwide including industrial, automotive, aerospace, food processing, water control and conservation, medical instrumentation, appliances and others. DiaCom offers state-of-the-art diaphragms designed for cost effectiveness, ease of installation, durability and high performance characteristics.

 **DIA-COM CORPORATION**
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