



**Empowering Green Hydrogen with Advanced
Membranes for a Greener Future**

Member of



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GMZ Enerji Membranes

Membrane Type	Anion Exchange Membrane
Production Method	Casting/Electrospinning
Thickness	40/80/100 μ^*
Ion exchange capacity	2,80-3,50 meq/g**
Tensile Strength	35-45 MPa
Water Uptake @25°C	20-35%
pH Stability Range @25°C	0-14

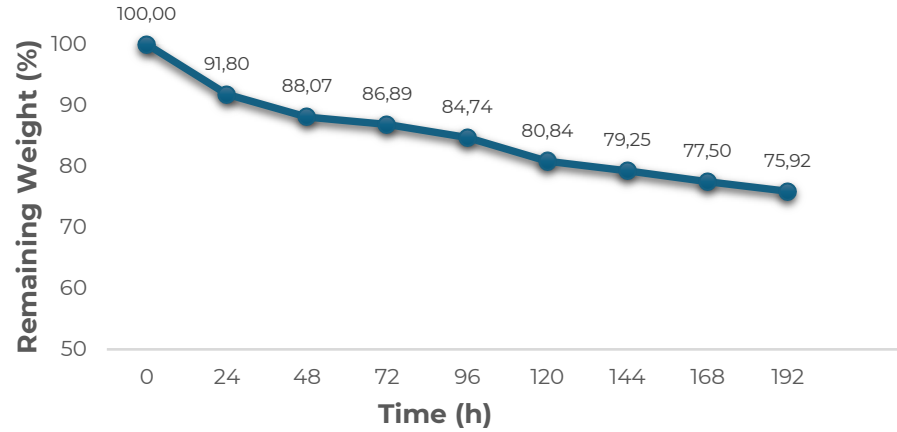
Membrane Type	Proton Exchange Membrane
Production Method	Casting/Electrospinning
Thickness	60/80/100 μ^*
Ion exchange capacity	1,10-1,50 meq/g**
Tensile Strength	30-40 MPa
Water Uptake @25°C	20-35%
pH Stability Range @25°C	0-14

*Production can be carried out in different thicknesses and dimensions.

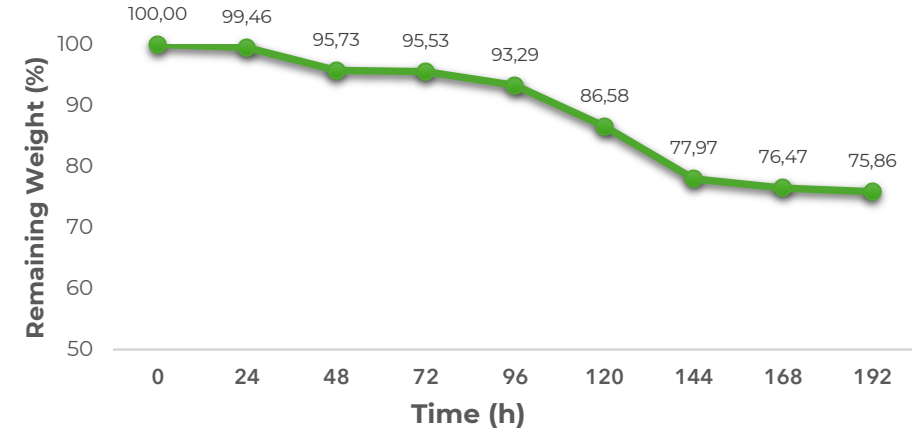
**Activated in 1 M KOH and 0,5 M H₂SO₄ for AEM and PEM, respectively

The Oxidation Stability of GMZ Enerji Membranes

Fenton Test* Results for AEM



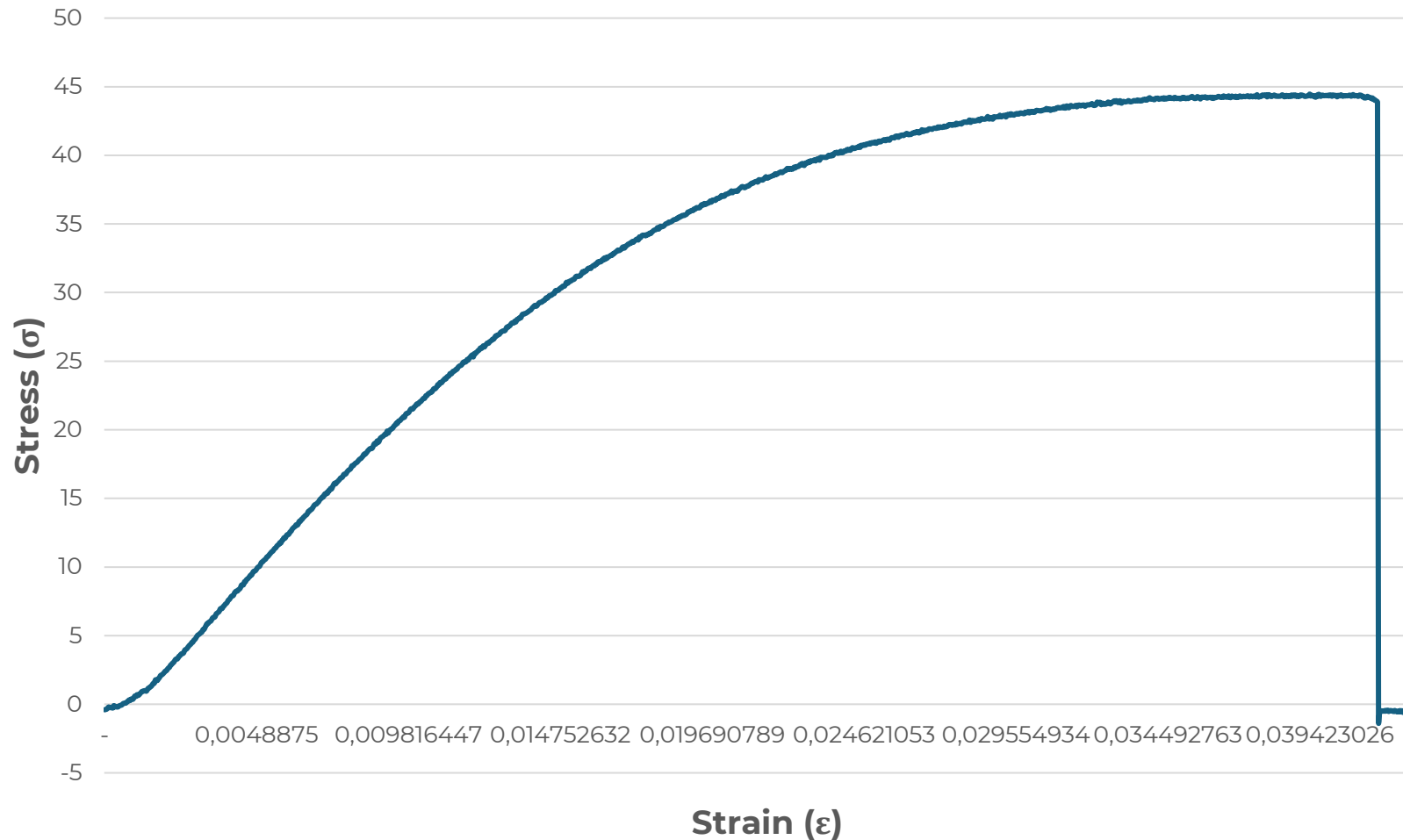
Fenton Test* Results for PEM



*3% H₂O₂ + 2 ppm Fe²⁺ @80 °C for 8 days

The Mechanical Strength of GMZ Enerji Membranes

Tensile Test Results for AEM



The Mechanical Strength of GMZ Enerji Membranes

Tensile Test Results for PEM

