

# FREUDENBERG GAS DIFFUSION LAYERS – FUEL CELL

## TECHNICAL DATA

PROPERTIES	UNIT	H15C13	H15C14	H15C15	H14C14	H14C15	H23C2	H23C15	H23C14	H23C8	H23C5	H23C3
HYDROPHOBIC TREATMENT		•	•	•	•	•		•	•	•		•
MICROPOROUS LAYER		•	•	•	•	•	•	•	•	•	•	•
Thickness @ 1MPa *	µm	155	150	155	145	145	220	210	215	205	220	235
Compression Set @ 1MPa *	µm	10	11	12	10	11	6	12	12	2	15	20
TP Electrical Resistance @ 1 MPa *	mΩ·cm <sup>2</sup>	7,5	6.5	6.0	5.5	5.5	9.0	6.5	6.5	7.0	6.5	9.0
TP Air Permeability acc. to Gurley (ISO 5636-5)	s	25	0.5	18	0.5	15	50	15	0.5	80	25	15
IP Air Permeability @ 1 MPa *	µm <sup>2</sup>	2.4	2.4	2.4	1.0	0.8	2.3	1.2	1.6	1.4	2.4	1.3

\* Freudenberg internal measurement standard

TP = through-plane

IP = in-plane

(Rev. 16 – 25.03.2024)

All values represent averages, which are subject to usual production tolerances. The values do not represent specifications.

Any warranty and liability is subject to Freudenberg Performance Materials GmbH & Co. KG's General Terms of Delivery and Payment applicable at the date of delivery.

For info, please contact us: [fuelcell@freudenberg-pm.com](mailto:fuelcell@freudenberg-pm.com)

Freudenberg Performance Materials GmbH & Co. KG · Hoehnerweg 2-4 · 69465 Weinheim, Germany · <https://fuelcellproduct.freudenberg-pm.com>

# FREUDENBERG ELECTROLYSIS ELECTRODE MATERIAL

## TECHNICAL DATA

PROPERTIES	UNIT	E20	E20H	E35	E35H
FLUORINE-FREE		•		•	
HYDROPHOBIC TREATMENT			•		•
Thickness @ 1 MPa *	µm	180	185	275	285
Compression Set @ 1MPa *	µm	1.5	5.0	2.0	6.5
TP electrical resistance @ 1MPa *	mΩ·cm <sup>2</sup>	5.3	5.5	8.5	8.8

\* Freudenberg internal measurement standard

TP = through-plane

IP = in-plane

(Rev. 04 – 25.03.2023)

All values represent averages, which are subject to usual production tolerances. The values do not represent specifications.  
Any warranty and liability is subject to Freudenberg Performance Materials GmbH & Co. KG's General Terms of Delivery and Payment applicable at the date of delivery.

For info, please contact us: [fuelcell@freudenberg-pm.com](mailto:fuelcell@freudenberg-pm.com)

Freudenberg Performance Materials GmbH & Co. KG · Hoehnerweg 2-4 · 69465 Weinheim, Germany · <https://fuelcellproduct.freudenberg-pm.com>