







## MEET THE SEALING REQUIREMENTS FOR NEW GASES



Butyl elastomer compound (IIR) 7BU2359, developed by Hutchinson, seals gas-insulated switchgear operating on g³ gas. It completes the range of elastomer compounds for high-voltage equipment.

The urgency of climate change is forcing the electricity transmission market to reduce emissions of gases that are harmful to the planet, and to replace gases with a high GWP (Global Warming Potential) impact with lower-impact gases such as  $g^3$ .

Hutchinson, a specialist in sealing and an expert in elastomer formulation, has developed a Butyl rubber compound (IIR) 7BU2359 that seals high-voltage equipment carrying g3 gas, the alternative solution to  $SF_6$  gas.

## RANGE OF ELASTOMER COMPOUNDS

Family	Compound	Hardness (Sh.A)	Tensile strength (Mpa)	CS (%)	CS conditions	TR10 (C°)	T°C of glass transition (C°)	SF <sub>6</sub> gas	g³ gas
EPDM	7EP1881	68	14	12	24h à 150°C	-48	-57	✓	×
NBR	PB701	68	17	12	24h à 100°C	-20	-30	✓	×
IIR	7BU2359	67	12	10	24h à 125°C	-50	-60	✓	✓

## **BENEFITS OF BUTYL 7BU2359**

- ▶ Compound compatible with g³ gas
- Inert to fluorinated gases
- Very good long-term impermeability (CS 10%)
- Very good impermeability to carbon dioxide ( $CO_2$ ): 3,3\*10<sup>-17</sup> m<sup>2</sup> Pa<sup>-1</sup> s<sup>-1</sup>
- ▶ Wide operating temperature range from -60°C to 125°C (peak temperature 175°C)
- Withstands surface treatments to aid assembly and colour treatments to distinguish two seals of identical appearance (Poka-Yoke)

