

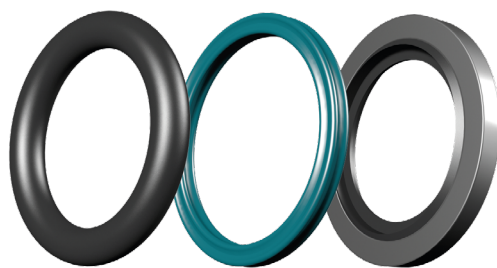


# HUTCHINSON®

We make it **possible**

## Compounds for SF6 & replacement gases

### IN GAS-INSULATED SWITCHGEARS



In-house Manufacturing, Safe Sealing



## IN-HOUSE MANUFACTURING, SAFE SEALING

As a leading manufacturer of sealing solutions, Hutchinson provides standard and tailor-made O-Rings, X-Rings, Bonded Seals and special-shaped seals.

The SF<sub>6</sub> gas, widely used in gas-insulated switchgears (GIS) to extinguish the electrical arc, has a global warming potential 17.000 times higher than the one of CO<sub>2</sub>.

The ecological urge brings the market to progressively replace the SF<sub>6</sub> by gases based on CO<sub>2</sub> or N<sub>2</sub> with much smaller molecules.

Common sealing materials such as CR, EPDM and NBR cannot be used anymore due to poor permeability values.

In addition to a wide range of existing compounds suiting GIS applications, Hutchinson has developed an IIR compound (7BU2359) specially made for these replacement gases.

## BENEFITS OF BUTYL 7BU2359

- ▶ Application: one for all, usable for replacement gases and SF<sub>6</sub>
- ▶ Temperature range: -60°C to 125°C (Peak 175°C)
- ▶ CO<sub>2</sub> Permeability:  $3,3 \cdot 10^{-17} \text{ m}^2 \text{ Pa}^{-1} \text{ s}^{-1}$
- ▶ Very good long-term sealing capability (compression set 10%)
- ▶ Coatable by colors for differentiation in the production process
- ▶ Inert against Fluor additives

## COMPOUNDS FOR GAS-INSULATED SWITCHGEARS

Compound	7BU2359	7EP1881	EP2107	7N2373	PB701
Rubber family	IIR	EPDM	EPDM	CR	NBR
Hardness	67 Sh A	68 Sh A	70 Sh A	72 Sh A	68 Sh A
Tear strength	12 MPa	14 MPa	12 MPa	21,3 MPa	17 MPa
Compression set conditions	10% 125°C for 24h	12% 150°C for 24h	10% 150°C for 24h	19% 100°C for 70h	12% 100°C for 24h
TR10	-50°C	-48°C	-57°C	-42°C	-20°C
Tg	-60°C	-57°C	-66°C	-50°C	-30°C
SF <sub>6</sub>	yes	yes	yes	yes	yes
Replacement gases	yes	-	-	-	with restrictions