

# Liquid Silicone Rubber

"At the first injection, we became aware of the expertise and quality of Pernoud's tools even on silicone with very few burrs after the first tests". "Thanks to Pernoud, we have removed the addition of a post-injection seal and any manual operations".

"The overmolded injection seals are the same as those found on the market. A real advantage for aftersales service". Our customers talk about it

LSR injection and overmolding technology to avoid post molding assembly operations of a gasket, membrane or shock absorber.



#### Pernoud commits to:

- Support customers in the choice of a suitable material and injection molding machine
- Improve productivity
- Enable an automated production
- Ensure a simultaneous cycle time
- Optimize scrape rate
- Design to cost

# Applications: water, air, oil, electric

WACKER			
WACKER	<b>Coolant application</b>	Oil application	Air application
Reference	ELASTOSIL <sup>®</sup> LR 3023/60*	ELASTOSIL <sup>®</sup> LR 3016/65*	ELASTOSIL <sup>®</sup> LR 3005/60*
Hardness	60 ShA	65 ShA	60 ShA
Post Curing	None	None	None
Qualified OEMs Specs	PSA S226106	VW TL 52479	VW TL 52686
Color	Blue	Off-white	Orange

\* Liquid Silicone Rubber reference from Wacker 🛛 🔊

- Different grades available to manage or not the post curing and the **adhesion** but also the **different specifications, colors, hardness and chemical compatibility.**
- The main material must be, if possible, a technical material such as PA, PPS or PPA to avoid post curing stage thanks to vulcanization within the mold at 180°C (can also be realized on metal parts).

### **Temperature management system**

Area 1: Thermoplastic injection

- Water cooling: 90°C / 194°F (For PA6 or PA66 GF30)
- Area 2: LSR Injection (cold sprue bush)
  - Water cooling: 20°C / 68°F
- Area 3: Silicone vulcanization
  - Core heating / electric cartridges: 180°C / 356°F



LSR overmolding with full vulcanization in the mold

#### <u>Nota:</u>

- 2 options: injection with a 2-shot or a single barrel machine with an additional injection unit
- Silicone vulcanization on nylon (PA6 or PA66) but also possible on PPS or PPA resin

## Contacts



R&D / Innovation Director Patrice Jacquet <u>p.jacquet@pernoud.com</u> +33 6 25 41 23 81



Key Account Manager Nicolas Jumel <u>n.jumel@pernoud.com</u> +33 7 89 22 49 70

Georges Pernoud SAS – Parc Industriel La Prairie – CS 90099 – 01100 Groissiat www.pernoud.com - +33 4 74 77 50 84

