

## Covid-19 Case Study: Cold Chain Storage Seal

The global Covid-19 pandemic is currently at a tipping point. With more infectious variants being identified, countries are implementing restrictive measures to slow down the infection rate.

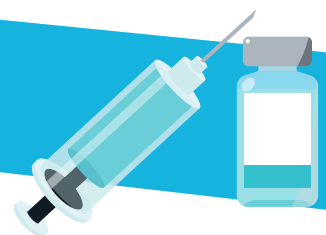
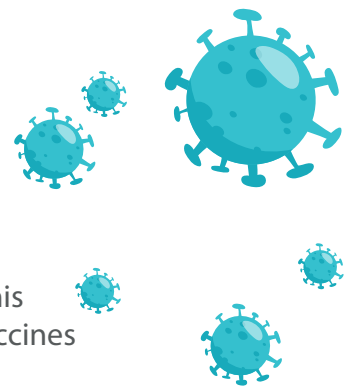
Vaccinations can't come quick enough, and now the global focus has shifted to rolling out approved vaccinations as efficiently as possible. Cold-Chain has always been the standard practice for vaccines through-out the pharmaceutical industry and the need increase capacity of cold storage is high.

Vaccines lose their effectiveness if they become too hot or too cold, especially during transportation and storage. Keeping vaccines at the manufacturer's recommended optimum temperature could be the difference in its ability to protect and resulting in costly wastage.

### The Opportunity & Challenge

A company specialising in Cold-Chain logistics, contacted Silicone Engineering to create a cold box seal. The cold box is needed to transport vaccinations and other temperature sensitive items.

Importantly, the cold box seal needed to have excellent compression set and be able to maintain its flexible sealing properties in operating temperatures down to -70°C. This was critical to the application to keep the vaccines at a maintained temperature.





## The Solution: **kSil**<sup>®</sup> QR250

Considering the project's requirement of low compression set, our material engineers recommended using our 'Quick Release' Silicone Sponge kSil<sup>®</sup> QR250.

kSil<sup>®</sup> QR250 was selected due to its ultra low compression set and its ability to recover and maintain the sealing properties in sub-zero conditions.

The company was delighted with the silicone sponge solution to meet the vaccines' high demand and logistical complexity.

