

# Low Temperature Sealing Solutions by Kastas Sealing Technologies

## NBR Solutions for Low Temperature Applications

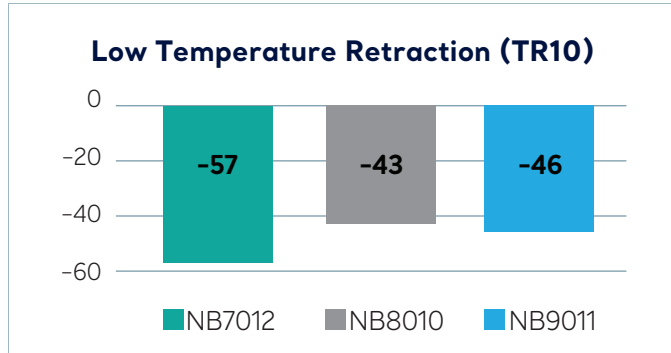
For the low temperature applications, Kastas Sealing Technologies developed three new compounds 70 Shore A (NB7012), 80 Shore (NB8010) and 90 Shore A (NB9011). All these three NBR compounds are suitable for low temperatures according to below mentioned values.

## PU Solutions for Low Temperature Applications

For the low temperature applications, Kastas Sealing Technologies developed PU9204 Polyurethane material. PU9204 has  $-52\text{ }^{\circ}\text{C}$  Tg(DSC) value which can resist  $-50\text{ }^{\circ}\text{C}$  for short intervals,  $-45\text{ }^{\circ}\text{C}$  continuously.

## HNBR Solutions for Low Temperature Applications

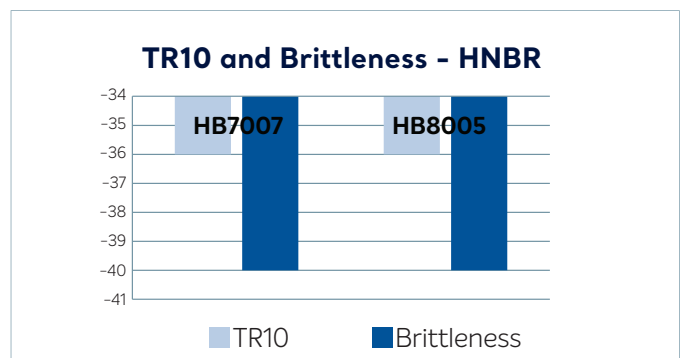
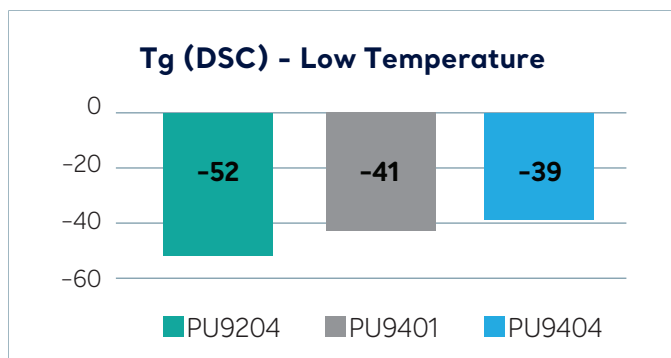
For the low temperature applications, Kastas Sealing Technologies developed 2 new compounds 70 Shore A (HB7007), 80 Shore A (HB8005). Both HNBR materials are suitable for  $-40\text{ }^{\circ}\text{C}$  in all static applications and medium duty dynamic applications.



<b>NB7012</b>	<b>70 SHORE A</b>	<b><math>-50\text{ }^{\circ}\text{C}</math></b>
<b>NB8010</b>	<b>80 SHORE A</b>	<b><math>-40\text{ }^{\circ}\text{C}</math></b>

<b>NB9011</b>	<b>90 SHORE A</b>	<b><math>-40\text{ }^{\circ}\text{C}</math></b>
<b>PU9204</b>	<b>92 SHORE A</b>	<b><math>-52\text{ }^{\circ}\text{C}</math></b>

<b>HB7007</b>	<b>70 SHORE A</b>	<b><math>-40\text{ }^{\circ}\text{C}</math></b>
<b>HB8005</b>	<b>82 SHORE A</b>	<b><math>-40\text{ }^{\circ}\text{C}</math></b>



All the low temperature testing of NBR materials has been conducted by ARDL (Akron Laboratories, Ohio, USA) which is an internationally recognized A2LA accredited laboratory. TPU materials are tested by accredited laboratories of raw material producers and all test results are recorded for archiving, TPU material is suitable to be used below the Tg value unlike rubber parts therefore lower temperatures below the Tg values could be used by the consent of Kastas Sealing Technologies.