



## RUBBER SPECIFICATIONS

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\* SAP PARTS' SPECIFICATIONS OF RUBBERS FOR O-RINGS

Sr.No.	Rubber Material Properties	Test Method Standards	Unit	NBR	NBR-LT	HNBR	HNBR-LT	SILICON	VITON
1	Working Temperature Range			-35 °C / + 110°C	-50°C/ +105°C	-25°C/ +135°C	-40 °C/ +135 °C	-60 °C / + 165°C	-10 °C / +190 °C
2	Short Term Peak Temp.			130°C	110°C	150°C	150°C	200°C	220°C
3	Colour	Visual		BLACK	BLACK	BLACK	BLACK	YELLOW	BLACK
4	Hardness	ASTM D2240	<b>Shore A</b>	55-65		55-65	55-65	55-65	55-65
5	Tensile Test (Min.)	ASTM D412	<b>Kg/cm<sup>2</sup></b>	100	60	140	100	60	125
6	Elongation (Min.)	ASTM D412	<b>%</b>	200	200	350	250	200	220
7	Specific Gravity	ASTM D792	<b>gm/cm<sup>3</sup></b>	1.164 ± 0.02	1.22 ± 0.02	1.9 ± 0.02	1.9 ± 0.02	1.32 ± 0.02	1.87 ± 0.02
8	TR10	ASTM D1329	<b>°C</b>	-43	-54	-20	-35	-55	-10

**Note :**

*NBR-LT : Low Temperature Service Nitrile Butedine Rubber.*

*HNBR-LT : Low Temperature service Hydrogenated Nitrile Butedine Rubber.*

*Short Term Peak : Temperature extent to withstand for short time period.*

*Reference Standards : International Standards for Rubbers- ASTM-D2240/ASTM-D412/ASTM-D792/ASTM-D1329*

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