

各種橡膠材質 物性 比較表

Property Comparison of Rubber Material

| | | | | |
|----|---|---|---|---|
| 特優 | 優 | 佳 | 差 | 劣 |
| A+ | A | B | C | D |

| 名稱 | 丁睛膠 NBR | 矽橡膠 SI | 氟橡膠 FKM | 乙丙膠 EPDM | 丁苯膠 SBR | 氯丁膠 CR | 丙烯酸脂橡膠 ACM | 天然橡膠 NR | 氯磺化聚 乙烯膠 CSM | 丁基橡膠 IIR | 聚氨酯 橡膠 PU |
|--|------------|-----------|------------|-------------|------------|-----------|---------------|------------|--------------------|-------------|-----------------|
| 拉力 Tensile Strength | A | D | A | C | A | A | D | A+ | A | C | A+ |
| 伸長 Elongation | A | A+ | D | A | A | A | D | A+ | A | A | A+ |
| 彈性 Rebound Resistance | A | C | C | A | C | A+ | C | A+ | C | D | A+ |
| 撕斷力 Tear Resistance | A | D | C | C | C | A | D | A+ | C | C | A+ |
| 耐磨 Abrasion Resistance | A+ | D | C | A | A+ | A | C | A+ | A | A+ | A+ |
| 撞擊力 Impact Strength Resistance | A | D | C | A | A+ | A+ | D | A+ | A | A | A+ |
| 氣密性 Gas Impermeability Resistance | A | D | A | C | C | A+ | C | C | A | A+ | A |
| 耐氧化 Oxygen Resistance | C | A+ | A+ | A | C | A | A | C | A+ | A+ | A |
| 耐臭氧 Ozone Resistance | D | A+ | A+ | A+ | D | A | A | D | A+ | A | A |
| 耐候 Weathering Resistance | C | A+ | A+ | A+ | C | A | A | C | A | A+ | A |
| 耐日光 Flame Resistance | D | A+ | A+ | A+ | C | A | A | D | A+ | A+ | A |
| 耐熱 Heat Resistance | C | A+ | A+ | A+ | C | A | A | D | A | A | C |
| 低溫性 Low Temperature Resistance | C | A+ | A | A | C | C | D | A | C | C | A |
| 油與汽油 Oil and Fuel Resistance | A | C | A+ | D | D | B | A | D | B | D | A |
| 動植物油 Animal and Vegetable Oil Resistance | A+ | B | A+ | A | C | A | A+ | C | A | A | A |
| 酒精 Alcohol Resistance | A | A | A | B | A | A+ | A | A | A+ | A | B |
| 鹼液 Alkaline Resistance | A | D | B | A | C | A+ | D | C | A+ | A+ | D |
| 酸液 Acid Resistance | A | C | A | A | B | A | C | B | A | A | D |
| 溶劑油 Aliphatic-solvent Resistance : Aliphatic | A+ | D | A+ | D | D | A | A+ | D | A | D | A |
| 溶劑油 Aliphatic-solvent Resistance : Aromatic | B | D | A+ | D | D | C | C | D | C | D | D |
| 氧化溶劑 Oxygen Ated-solvent Resistance. | D | C | D | A+ | A | D | D | A | C | A+ | D |
| 耐水性 Water Resistance | A | A | A | A+ | A | A | D | A+ | A | A+ | C |

簡介

橡膠材質 耐溫 比較表

Rubber Material Temperature Character Comparison

| 材質 | 一般材質溫度範圍 (°C) | 特殊配方可達到之溫度範圍 (°C) |
|-----------------|---------------|-------------------|
| 丁睛膠(NBR) | -40~100 | -55~130 |
| 矽橡膠(SI) | -50~220 | -70~250 |
| 氟橡膠(FKM) | -20~200 | -40~250 |
| 乙丙膠(EPDM) | -40~150 | -50~170 |
| 丁苯膠(SBR) | -30~100 | -50~110 |
| 氯丁膠(CR) | -40~100 | -50~120 |
| 丙烯酸脂橡膠(ACM) | -15~150 | -25~175 |
| 天然橡膠(NR) | -40~70 | -40~110 |
| 氯磺化聚乙 烯膠(CSM) | -30~120 | -25~150 |
| 丁基橡膠(IIR) | -50~100 | -60~130 |
| 聚氨酯橡膠(PU) | -30~75 | -50~100 |
| 氫化丁睛膠(HNBR) | -20~150 | -40 ~175 |

- A+ Excellent
- A Good to Excellent
- B Good
- C Fair, can be used if no other materials available
- D Not recommended