



Radosil-FR has a shelf life of at least six months and is optimised for all common silicone processing methods. (Source: Rado Gummi GmbH)

18. March 2021

Rado: New Radosil-FR range of silicone compounds compliant with UL 94 V-0

According to the Radevormwald-based German company Rado Gummi GmbH, many synthetic and natural materials are highly flammable and combustible, meaning that flame-resistant products need to comply with the most stringent safety requirements and statutory obligations. These requirements are highly demanding, as ultimately they need to satisfy the widest range of demands such as smoke formation, burning speed and flash point. The strictest flammability standards for products are found in the automotive industry, aeronautics and also rail transportation and construction requirements for structural and building protection. The classification of burn ratings involves the evaluation of burning stoppage and afterglow values, burn speed and the dripping behaviour of the burning specimen.

The silicone compound Radosil-FR 60 is Rado Gummi GmbH's first receipt in a range of flame-retardant silicone compounds, and passed all of the tests for the plastics flammability standard UL 94, achieving a classification of V-0. In the case of fire, the Radosil range is said to produce considerably less smoke and – unlike halogenous plastics – gives off no harmful or corrosive hydrogen chloride gases. This makes the new Radosil-FR compound range particularly suitable for use in e-mobility (e.g. for battery cover seals, power management and high-voltage cable sheaths). Other potential uses for the flame-retardant Radosil-FR range are railway vehicles, in air transport and in the building sector as window and door seals, fire curtains and insulation. The Radosil-FR compound range is available in the hardnesses 40 – 90 Shore A and in a variety of colours. Radosil is a protected registered trademark of Rado Gummi GmbH.

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Technical data

Property	Radosil 60 UL (12-2714/60)	Method
Appearance	Cream or coloured	
Hardness	60 Shore A	ISO 7619-1
Density	1.38 g/cm ³	ISO 1183 1-A
Strength	8.0 N/mm ²	DIN 53504
Elongation	300 %	DIN 53504
Flame resistance	Rating: V-0 (UL report KUEXT15707)	UL 94 V, 6 th Edition, Rev. 27 June 2020
Vulcanisation conditions: press 15 min / 165 °C, temper. 4 h / 200 °C / Version: January 2021		