



**RTF 762**

**Silicone Rubber Foam**

**Product Description**

RTF762 silicone rubber foam is a liquid compound which cures at room temperature to a medium density foam with the addition of a curing agent. The product is a two-component compound, supplied in kit form. Thorough mixing of the curing agent with the base compound initiates the chemical reaction which results in the formation of foam within 20 minutes at room temperature.

**Key Performance Properties**

- Medium density flexible foam
- Room temperature cure
- Composition free of solvents and solvent odour
- Primerless adhesion on many metals, glass, fabrics and foils.
- High quality adhesion capabilities to the substrates with primer
- Chemically blown without the use of CFC's
- Non-halogenated
- 10:1 mix ratio by weight only

**Applications**

- Suggested applications include, but are not limited to:
- Cast-in-place thermal insulation
- Small moulded parts
- Foam/foil laminates for heat management
- Sheet stock for firewall applications and die cut gaskets
- Sound dampening

**Typical Product Data**

**Uncured Properties**

Property	RTF762A	RTF762B
Colour	Off White	Clear
Density, g/cm <sup>3</sup>	1.22	1.0
Viscosity (mPa.s)	65,000	1,500

**Cured Properties**

**(Mixed 10:1 by weight at 25°C )**

Mixed Properties	
Appearance	Off White
Work Time (minutes)	3.5
Expansion ratio	4:1
Time for full rise (minutes)	20

**Cured Physical Properties**

**(Moulded Sample Cured 24 hrs. @ 25°C )**

Appearance	Off White, flexible foam
Density, kg/m <sup>3</sup> (lb/ft <sup>3</sup> )	240 (15)
Tensile Strength, MPa	0.52
Elongation, %	90
25% Compression Deflection(1) kg/cm <sup>2</sup>	0.5

<b>Thermal</b>	
Thermal Conductivity <sup>(1)</sup> , W/m °K	0.06
Operating Temperature Range	-60C to 204C
<b>Flammability<sup>(2)</sup></b>	
Limiting Oxygen Index	30
UL94, 6.4mm	V-0
ASTM E-162 Radiant Panel Flame Spread Index <sup>(1)</sup>	16
ASTM E-662/NFPA258 Smoke Density <sup>(1)</sup> Flaming (4 minutes)	18
Smoldering (4 minutes)	9
FAA25.853 (b) Vertical Burn <sup>(1)</sup>	Compliant

(1) Information provided for customer convenience and is not tested on a routine basis.

The above test, claims, representations and descriptions regarding the flammability of the product described are based on a standard small scale laboratory test and as such are not reliable for determining, evaluating, predicting or describing the flammability or burning characteristics of this product under actual fire conditions, whether this product is used alone or in combination with other products.

**Specifications** Typical product data values should not be used as specification. Assistance and specifications are available by contacting Momentive Performance Materials Technical Service RTV1 and RTV2.

**Instructions for Use** **Mixing**  
High temperatures (above 38°C) in the working areas should be avoided to prevent premature expiration of the working time. Surfaces and mixing containers should be clean and dry before use. Mixing container should be filled to only one-fourth of capacity to allow adequate room for stirring and expansion.

**WARNING:** This product expands by the evolution of hydrogen gas. Mixing and handling of catalyzed material should be done in well ventilated areas away from sparks, flames or other sources of ignition in and above the work area.

RTF762A base compound is mixed with RTF762B curing agent in a 10:1 ratio by weight. The base material and curing agent are supplied in specially packaged kits, pre-measured in a 10:1 ratio. When using less than a full kit, both base compound and curing agent must be weighed and measured to insure the proper 10:1 blend ratio. Mixing may be done by hand or machine. When hand mixing, use a clean, flat-bladed spatula or paint stirrer. Material clinging to sides and bottom of the container should be folded into main contents twice during the mixing cycle.

Using a power mixer, a 30 second cycle is usually required for thorough mixing.

Avoid high mixer speeds for prolonged periods which could cause heating of the material and resultant shortening of the pour time.

Automatic dispensing machines designed to meter (weigh), mix and dispense silicone foam materials will reduce the necessary preparation for use where volume is sufficient to justify investment.

### **Metering and Dispensing**

RTF762 silicone foam is dispensed with standard two-component meter mix equipment. Uniform and thorough mixing is necessary to produce high-quality foam. Care must be taken not to induce excessive heat from the mixing process. Because equipment selection must be made based on the requirements of each application contact Momentive Performance Materials for assistance on pump selection.

### **Application and Cure Time Cycle**

At 25C , RTF762 silicone rubber foam will have a work time of approximately 3.5 minutes. Expansion is complete within 20 minutes after addition of curing agent. The foam produced may be handled within 4 hours. The time between mixing and cure may be lengthened by cooling the base compound before catalyzing (do not freeze). The cure time can be shortened by applying mild heat (typically 50C ).

### **Bonding**

Unlike most two-component silicone elastomers, RTF762 silicone rubber foam displays primerless adhesion to various materials including metals and glass. If adhesion is required, first clean the substrate thoroughly with a non-oily solvent such as naphtha (mineral spirits) or methyl ethyl ketone (MEK). Apply the freshly catalyzed liquid RTF762 silicone rubber foam to the substrate and allow to cure. Adhesion build occurs over time at room temperature (typically 24 hours). This process can be accelerated with heat (up to 150C ) depending on the substrate.

For difficult to bond substrates, a primer may be needed. Clean the substrate as described above, then apply a thin uniform film of silicone primer and allow the primer to dry for one hour at room temperature. SS4155 primer is used on metal surfaces SS4120 primer is used on plastic and glass surfaces. Proceed with the RTF762 silicone rubber foam application as described above.

If adhesion is not desired, a non-silicone mold release agent should be applied to the substrate before RTF762 silicone rubber foam application. Dry fluorocarbon or dry polyethylene spray mold releases can be evaluated in such situations. Refer to the following section on surface compatibility before proceeding.

### **Surface Compatibility**

RTF762 silicone rubber foam will cure in contact with most clean dry surfaces. However, cure inhibition of RTF762 silicone foam may occur in contact with vinyl plastics synthetic and natural rubbers, sulfur-containing materials such as polysulfides, tin soaps, certain epoxies containing strong amine catalysts, latex gloves and some clays, woods, leathers, tape adhesives, heat-cured rubbers and chlorinated substances such as neoprene. Cure inhibition is characterized by a gummy appearance of the RTF762 silicone foam at the interface between it and the substrate. Each application should be tested for compatibility.

**CLEAN UP AND REMOVAL**

Before curing, solvent systems such as naphtha or methyl ethyl ketone (MEK) are most effective for cleaning and removing the material.

After cure, solvent systems such as toluene or xylene will swell the silicone rubber foam and facilitate mechanical removal by scraping.

**Handling and Safety**

Material Safety Data Sheets are available upon request from Momentive Performance Materials . Similar information for solvents and other chemicals used with the Momentive Performance Materials products should be obtained from your supplier. When solvents are used, proper safety precautions must be observed.

Containers of RTF762A base compound and RTF762B curing agent should remain unopened prior to use.

**CAUTION**

The RTF762B curing agent can generate flammable gas on contact with acidic, basic or oxidizing materials and such contact must be avoided. Keep curing agent containers tightly closed.

If containers are left unsealed and usability is in doubt, a small portion of RTF762A base compound should be catalyzed at a 10:1 ratio with the RTF762B curing agent. If the mixture foams adequately and cure time is normal, it may be considered still usable.

This product is manufactured and marketed for industrial use only.

**Storage and Warranty Period**

The warranted shelf life will be indicated by the ' use before date' on the associated documents with a minimum of 4 months when stored in the original unopened containers below 27° C.

**Availability**

RTF 762 is available in kits of 450 g, 5 kg, 20 kg and 225 kg.

RTF 762 A-Component is also available in drums of 204 kg.

RTF 762 B-Component is also available in pails of 20 kg.



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