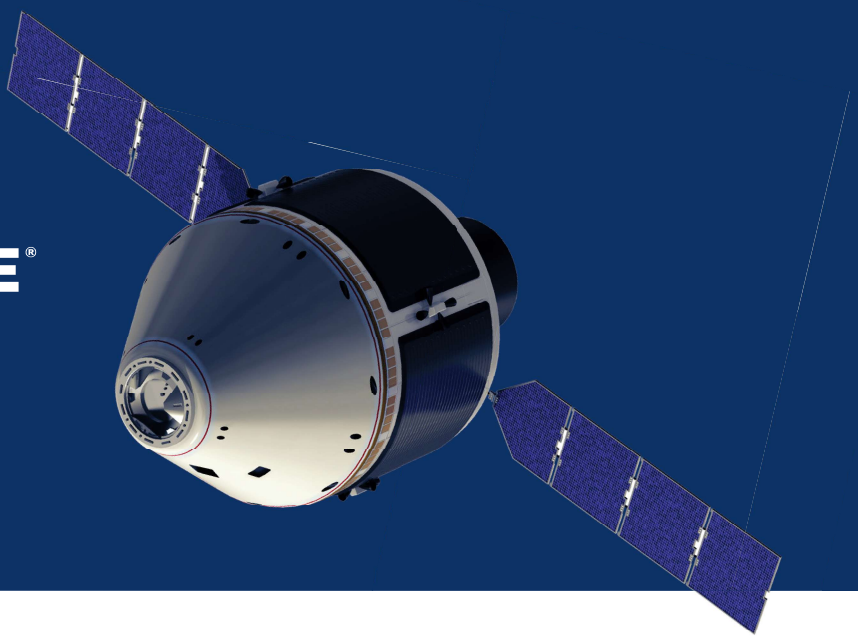
MOMENTIVE®



RTV Silicones for Low Outgassing Applications

Advanced silicone products that can deliver outstanding performance with minimal outgassing

Since the beginning of time, people have looked up at the stars and longed to explore the world above them. For more than 60 years, Momentive has been part of the journey into space—providing the silicone in the boots of the first astronaut to walk on the moon—in the rockets that propelled those pioneers into orbit—and on every US manned space flight since. Building on the legacy of our past, Momentive continues to develop innovative silicones that help today's aerospace pioneers reach ever greater heights. From launch to landing, Momentive's advanced silicone products enable the next generation of space exploration.

Typical Benefits of Low Outgassing RTVs

- Loss of less than 1% of mass in a vacuum*
- Produces less than 0.1% volatile condensable materials in a vacuum*
- Low outgassing products meet or exceed ASTM E595 testing standards
- Maintain critical properties for extended time over the wide range of extreme temperatures encountered by spacecraft -130°C (-200°F) to 260°C (500°F)
- Remains flexible in the extreme low temperatures of space
- Excellent thermal insulation
- Very strong adhesion with primer to support structural integrity
- UV and ozone resistance
- Room temperature cure
- Available in paste to flowable viscosities to accommodate a wide range of applications

POTENTIAL APPLICATIONS

Cast in place heat shielding

Solar array and optical equipment sealing

Crew capsule applications

Thermal insulation of sensitive components

Protective coatings for critical equipment

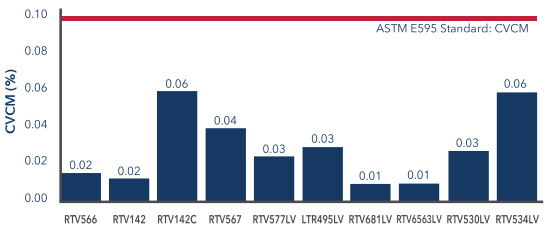
Encapsulants & potting for high heat locations

Interior & exterior adhesives

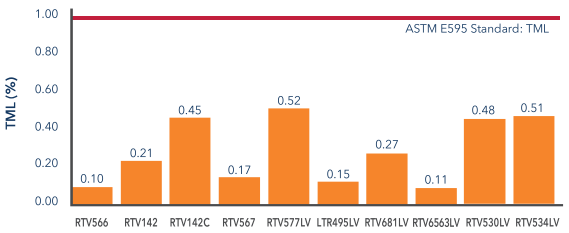
Flexible composite coatings

Thermal management of electronics

ASTM E595 Results: CVCM (≤0.10%)



ASTM E595 Results: TML (≤1.00%)



*Low outgas testing performed using ASTM E595 Low Outgas Test Procedures in a vacuum environment. Test results. Actual results may vary.

Momentive offers an expanding line of low outgassing materials for sealing, protective coatings, electronics packaging, thermal interface materials, thermal protection systems and photovoltaic array assembly. The grades listed below meet or exceed ASTM E595 standard outlined in NASA SP-R-0022A and European Space Agency PSS-014-702.



Low Outgassing Product Line

Product	Cure Chemistry	Description	Potential Applications[2]	Useful Temp. Range
RTV142 RTV142C	Room Temperature [1] (Alkoxy)	White and translucent, one-component thixotropic paste, offering primerless adhesion	Adhesive, gasketing, sealing, bonding	-60° to 205°C (-75° to 400°F)
RTV566	Room Temperature [1] (Alkoxy)	Red, two-component paste with excellent release capabilities and wide temperature performance	Cast-in-place heat shielding, thermal insulation, potting, encapsulating electrical assemblies, PV assembly	-115° to 260°C (-175° to 500°F)
RTV567	Room Temperature [1] (Alkoxy)	Translucent, two-component flowable adhesive with excellent release properties	Encapsulating electrical assemblies, sealing, flowable	-115° to 205°C (-175° to 400°F)
RTV577LV	Room Temperature [1] (Alkoxy)	White, two-component thixotropic paste with excellent release capabilities and variable work and cure times through catalyst options	Cast-in-place heat shielding, thermal insulation, potting and encapsulating of electrical assemblies	-115° to 205°C (-175° to 400°F)
RTV681-LV	Addition	White, highly reflective thermal control coating with high emissivity and simple processing	Thermal management coating	-60°C to 150°C and up (-76°F to 302°F and up)
RTV6563-LV	Addition	Red, low density adhesive, with controlled flow with simple processing	Adhesive, sealing, bonding	-100°C to 260°C (-148°F to 500°F)
LTR495LV	Addition	Blue, two-component, thermally conductive, flame retardant paste	Thermal interface material, gap filling with 4 W/mK	-40° to 150°C (-40° to 302°F)
RTV530-LV, RTV534-LV	Room Temperature [1] (Alkoxy)	White, two-component thixotropic pastes with fast tack free time, rapid adhesion, and easy processing in dual cartridge	Adhesive, sealing, bonding, component staking	-115°C to 150°C (-175°F to 302°F)

(1) Standard cure conditions are 25°C (77°F)/50% RH; (2) List of potential applications is not exhaustive. Typical properties are average data and are not to be used as or to develop specifications.

Customer Service Centers

Email commercial.services@momentive.com

MOMENTIVE

Americas
+1 800 295 2392
+1 614 986 2495

Europe, Middle East, Africa and India
+00 800 4321 1000
+40 212 044229

China
+800 820 0202
+86 21 3860 4892

Japan
+81 276 20 6182
+81 276 20 6182

All Other Countries
+60 3 9206 1543

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY "SUPPLIER"), ARE SOLD SUBJECT TO SUPPLIER'S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER'S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN.

Each user bears full responsibility for making its own determination as to the suitability of Supplier's materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier's products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier coveringsuch use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

Momentive and the Momentive logo are trademarks of Momentive Performance Materials, Inc.
Copyright 2024 Momentive Performance Materials Inc. All rights reserved.