



Silicone Solutions for Drones and UAVs

Advanced silicone products that meet the challenges of next generation mobility

At Momentive we understand the unique challenges of the drone industry. Hardware boundaries are constantly pushed as the role of drones and unmanned aerial vehicles evolves. You need materials that can keep up. That's why Momentive's advanced silicones are ideal for drone assembly and maintenance and repair operations. Our broad range of silicone products can provide environmental protection, increase hardware reliability, improve sensor performance and extend component life. From launch to landing, Momentive's advanced silicone products enable the next generation of UAVs.

Typical Benefits of Silicones for Drones and UAVs

- Maintains critical properties for extended time over a wide range of extreme temperatures -115°C (-175°F) to 260°C (500°F)
- Sustained flexibility in extreme low temperatures
- Excellent dielectric and thermal insulation
- Very strong adhesion with primer to support structural integrity
- UV and ozone resistance
- Cures at room temperature
- Available low outgassing solutions that meet or exceed ASTM E595 testing standards
- Available in paste to flowable viscosities to accommodate a wide range of applications

POTENTIAL APPLICATIONS

Thermal Management

Vibration dampening

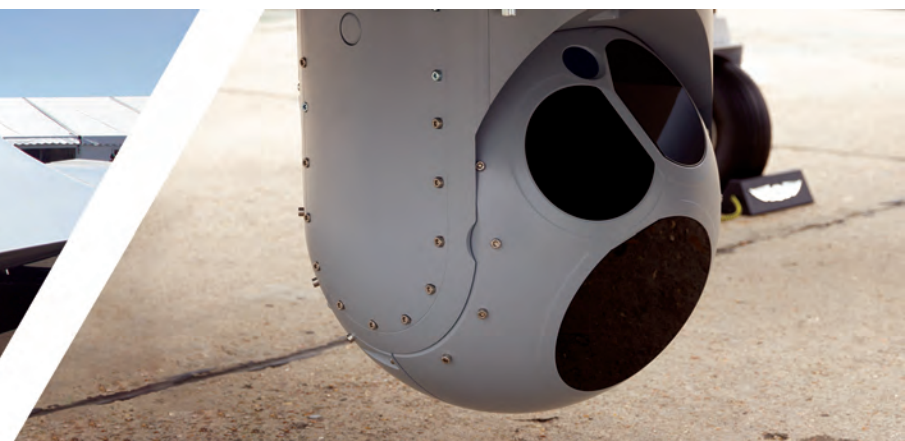
Stress reduction

Waterproofing and case sealing

Protective coatings for critical circuits and components

Sensor lens coatings to protect and improve LIDAR transmission rates

Optical bonding for enhanced displays



Typical Physical Properties

(selected grades only; please contact us for material selection support)

Product	Description	Appearance	Cure Type	Viscosity (Pa·s)	Hardness	Tensile Strength (Mpa)
Battery Management						
TUV7130	PCB encapsulation/vibration dampening	Translucent	UV	21	31 (Type E)	-
TN3085/88	Thermal adhesive	Grey/White	CC	-	46 (Type A)	2.3
XE11-B5320	Thermal adhesive	White	CC	-	83	4.1
TIA208R	Battery potting	Black	CC	4.2	40 (Type A)	1.6
RTV133	Flame suppressant	Black	CC	-	45 (Shore A)	0.7
Connectors						
TN3305	Pin Connector – water proofing	Clear/white/black	CC	47	14 (Type A)	1.5
TSE3251	Heat cure adhesive	White	AC	8.5	16 (Shore A)	0.7
TSE397	Non-corrosive adhesive sealant	Clear/black/white	CC	50	13	1.2
EMI Shielding, Thermal Materials						
TIA241GF	Gap filler	Blue	AC	130	45 (Type E)	0.2
CXE16-0226B	EMI	Black paste	CC	430	44 (Shore A)	1.9
LTR3292	Thermal adhesive (E595?)	Grey	AC	12	83 (Shore A)	2.6
O-ring/Case Sealing						
RTV100 Series	Adhesive sealants	Various	CC	-	20-30 (Shore A)	3.0
TSE322	Adhesive sealant	Light Blue	AC	110	45 (Type A)	3.4
TN3005	Adhesive sealant	Clear/white/black	CC	-	22 (Type A)	1.8
TN5015	Adhesive sealant	Grey	CC	-	50 (Shore A)	4.5
TN8000	Adhesive sealant	White/black/grey	CC	-	33 (Type A)	2.2
Sensor Coating						
TSE322	Sealing	Light Blue	AC	110	45 (Type A)	3.4
TN5015	Sealing	Grey	CC	-	50 (Shore A)	4.5
TSE3051	Gel	Transparent	AC	0.7	-	-
TSE3663	Potting	white (A) pale yellow (B)	CC	4000	41 (Type A)	1.4
Additional Potting Materials						
TIA222G		Grey	CC	20	45 (Type E)	-
TIA208R		Black	CC	4.2	40 (Type A)	1.6
TIA350R		Grey	AC	67	77 (Type A)	1.6

(1) AC = Addition Cure / CC = Condensation Cure

Typical properties are average data and are not to be used as or to develop specifications.

MOMENTIVE™

TECHSIL®

Adhesives | Silicones | Tapes | Seals | O-Rings

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