DAPCO™ 2200

Dapco™ 2200 is an adhesive, two-component, solvent-free, thixotropic silicone paste. Dapco™ 2200 is most commonly used as a coating, sealant, or filleting material in the construction, repair and maintenance of all types of aircraft. The product can be applied using a variety of methods and is especially useful where fire resistance, exposure to phosphate ester fluids, and/or exposure to extreme temperatures -65°F (-54°C) to 400°F (204°C) are major considerations. The product can also be used as an insulative and/or ablative heat shield. The product is available in kit sizes of 2.5 oz and 6 oz injection kits.

Features and Benefits

- Quick Cure
- Excellent fire resistance to 2000°F (1093°C)
- Service temperature of -65°F (-54°C) up to 400°F (204°C)
- Universal primerless adhesion to diverse substrates
- Good resistance to aerospace chemicals
- Offers non-inhibition curing characteristics against other sealants and adhesives
- Non-Volatile Content of >96%
- Qualified to BMS 5-63, BAMS 552-004, and AMS3374

CHARACTERISTICS

Table 1 | Physical Properties

Property	Part A	Part B	Mixed
Solids, %	100	100	100
Consistency	Paste	Viscous Liquid	Thixotropic Paste
Density, lb/gal (kg/L)	11.6 (1.39)	7.8 (0.94)	11.4 (1.37)
Shore Hardness ASTM D 2240	Shore A: 50		
Shelf Life ¹	6 months stored at or below 75°F (24°C)		

¹ Keep in unopened foil bags.

Table 2 | Product Availability

Property		
Color	Part A Part B Mixed	Gray White Gray
Kit Size	2.5 oz 6.0 oz	



Table 3 | Flammability Properties of Dapco[™] 2200

Property	DAPCO 2200	Substrate
Flame Resistance	Self-extinguishing Time: < 2 sec	0.050 in (1.27 mm) Titanium,
BMS 5-63	Flame Penetration: None	TI-6AL-4V

PROPERTIES

When cured in accordance with the recommended schedule, the following typical properties are developed:

Table 4 | Mechanical Properties of Dapco[™] 2200

Property	DAPCO 2200	Substrate	
Lap Shear Strength ASTM D 1002 Control 7 days at 400°F (204°C)	psi (MPa) 330 (2.3) 330 (2.3)	0.050 in (1.27 mm) Included: Stainless Steel, Titanium, Aluminum (bare), and Aluminum (bare) primed	
7 days ay 120°F (49°C) & 100% RH 7 days in Skydrol [®] LD4 Hydraulic Fluid	330 (2.3) 260 (1.8)		
Floating Roller Peel	lb/in(kN/m)	0.025 in (0.63 mm) and 0.064 in	
ASTM D 3167	20 (3.5)	(1.63 mm) Aluminum	

PROCESSING

HANDLING

Mixing

Part A and B must be mixed in the correct ratio and mixed thoroughly. Product is supplied in injection kits and comes with mixing instructions. Mechanical mixing is recommended.

Parts	Weight
Part A	100
Part B	4.4

Tack Free Time

60 minutes

Work life

Product will extrude from the tube adequately for 30 minutes after mixing.

APPLICATION

Applying

The substrate must be free from contamination, i.e. dirt, oil grease, etc. Clean the surface by wiping with a suitable solvent/cleaning agent and dry thoroughly. Handling strength is achieved in less than 4 hours at 75°F (24°C) (loads on the product should be limited until full cure is achieved).

Curing

Dapco™ 2200 is generally cured at ambient temperatures above 55°F (13°C). Moisture helps develop final properties (a relative humidity ranging between 30% - 70% is preferred). Product reaches a hardness of 30 shore A in 4 hours at 75°F (24°C) and 50% R.H., allowing for quick repairs and fast "fly away" times. Full cure is achieved in 48 hours, however optimum physical properties are developed when the product is cured for a minimum of seven days for sealing applications and 14 days for faying surface applications at 75°F (24°C) and 50% R.H.





Cure may be inhibited by proximity or contact with a variety of materials including old RTV silicone sealant of the tin-cure variety, polysulfide, sulfur, amine and amide compounds, natural, nitrile or other organic rubbers, paper masking tape, plasticizers, lubricants, release agents or solvents.

Cleanup

Before the material has cured, the excess may be removed using commercial solvent. For optimum removal of silicone residue prior to paint or coating application. Dapco™ 2000 diluent is recommended.

HEALTH & SAFETY

Please refer to the product SDS for safe handling, personal protective equipment recommendations and disposal considerations.

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