

DAPCO™ 2100 Primerless Silicone Firewall Sealant

Description:

DAPCO™ 2100 is an adhesive, solvent-free, thixotropic silicone paste. DAPCO™ 2100 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.

DAPCO™ 2100 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 kit style tubes.

For more information, contact:

D Aircraft Technical Service
1191 N. Hawk Circle
Anaheim, California 92807
714 632-8444

Features and benefits:

- **Excellent fire resistance to 3500°F**
- **Service temperature of -65°F up to 400°F**
- **Universal primerless adhesion to diverse substrates**
- **Good resistance to aerospace chemicals**
- **Offers non-inhibition curing characteristics against other sealants and adhesives**
- **Extended application time**
- **One part premixed room temperature stability**
- **Non-Volatile Content of 97%**
- **Qualified to BMS 5-63, AMS3374, and CMNP009**

Typical properties

| | |
|-----------------------------------|---|
| Color: | Grey |
| Appearance: | Thixotropic paste |
| Viscosity (poise @ 77° F): | >20000 |
| Specific gravity (cured): | 1.37 |
| Shelf life: | 6 months from mix/fill date if stored in a foiled bag at ambient conditions. Once opened, sealant should be recapped and replaced in resealable bag between times of usage. Shelf life good for 30 days after initially opened. |

Handling

Tack free time

10-15 min.

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 24 hours at 72°F (25°C) (loads on the product should be limited until full cure is achieved).

Curing

DAPCO™ 2100 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). Optimum physical properties are developed when the product is cured a minimum of seven days for sealing applications, and 14 days for faying surface applications at 72°F (22°C) and 50% R.H.

Cleanup

Before the material has cured, the excess may be removed using DAPCO™ 2000 diluent.

Typical cured properties

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

| | |
|--------------------|----|
| Hardness (shore A) | 50 |
|--------------------|----|

Lap shear strength, psi

Substrates include: stainless steel, titanium, aluminum, and primed aluminum

| | |
|---------|-----|
| Control | 350 |
|---------|-----|

| | |
|-----------------|-----|
| 7 days at 400°F | 350 |
|-----------------|-----|

| | |
|---------------------------|-----|
| 7 days at 120°F & 100% RH | 350 |
|---------------------------|-----|

| | |
|------------------------------------|-----|
| 7 days in BMS 3-11 hydraulic fluid | 280 |
|------------------------------------|-----|

| | |
|--------------------|----|
| Peel strength, pli | 20 |
|--------------------|----|

| | |
|-----------------------------------|---|
| Flame resistance, BMS 5-63 rev. J | < 2 sec. self extinguishing time 0 flame penetration |
|-----------------------------------|---|

| | |
|----------------------|--------------------------|
| Thermal conductivity | 0.224 W/m-K (ASTM E1225) |
|----------------------|--------------------------|

Storage and handling

Shelf life: 4 months from mix/fill date at or below 77°F (25°C)

6 months from mix/fill date at or below 40°F (4°C)

Keep in unopened foil bags.

Safety

Material Safety Data Sheet available upon request.

Important notice

The information and statements herein are we believe to be reliable but are not to be construed as a warranty or representation for which Cytec Engineered Materials assumes legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. **NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.** Nothing herein is to be taken as permission, inducement or recommendation to practice any patent invention without a licence.

contact
us

Cytec Engineered Materials Inc. North American Facilities

Anaheim, California
714 630-9400 • Fax 714 666-4345

Havre de Grace, Maryland
410 939-1910 • Fax 410 939-8100

Greenville, Texas
903 457-8500 • Fax 903 457-8598

Winona, Minnesota
507 454-3611 • Fax 507 452-8195

Orange, California
714 639-2050 • Fax 714 639-2033

D Aircraft Products, Inc.
Anaheim, California
714 632-8444 • Fax 714 632-7164

Cytec Carbon Fibers LLC
Piedmont, South Carolina
800 222-2448 • Fax 864 299-9333

GLOBAL HEADQUARTERS

Tempe, Arizona
480 730-2000 • Fax 480 730-2390

Cytec Engineered Materials, Ltd. United Kingdom

Wrexham, UK
+44 1978 665200
Fax +44 1978 665222

Cytec Engineered Materials (GmbH) Germany

Ostringen, Germany
+49 7523 912800
Fax +49 7523 912899

