

TECHNICAL DATA SHEET

PRODUCT # FE-7004

DESCRIPTION

Most versatile two component adhesive in our line. Translucent, amber in appearance. Bonds to most metals and rigid plastics, rubber, concrete, wood, ceramics and most other fabricating materials. Features high shear strength with high impact, chemical and water resistance. Service temperatures can range from -100 deg. F to 200 deg. F with blending ratios from 1/1 by volume (flexible) to 2/1 by volume (rigid). Easy product to mix by hand or meter/mix equipment. Typical applications include wood lamination for sporting goods, potting small parts for electronics and as an all purpose adhesive.

TYPICAL PHYSICAL PROPERTIES AND GENERAL INFORMATION

Property	Part A	Part B	Blend
BLENDING RATIO BY VOLUME	100	50	
BLENDING RATIO BY WEIGHT	100	42	
COLOR	White	Amber	Amber
COLOR MODIFIER	Milky	Dark	
DENSITY, ASTM D0792, WEIGHT PER U.S. GALLON (lb-mass/gal)	9.5 – 9.7	7.9 – 8.1	9 – 9.2
GEL TEMPERATURE, TMTS144, GEL TIME TEMPERATURE (F.) (deg. F)			76 – 78
GEL TIME, GEL TIME IN MINUTES (3 FL. OUNCES MIN: 2.8 MAX: 3.2) (minute)			50 – 70
ODOR	Sweet	Ammonia	
SHELF LIFE	365	365	
SOLID CONTENT (NON-VOLATILES), TMWB052, SOLIDS (percent)	100	100	100
VISCOSITY, TMTS001, VISCOSITY (cP)	3, 500	5, 000	13, 500
VOLATILE ORGANIC CONTENT (VOC), EPA 450, VOC AS IS – THEORETICAL METHOD (g/L)	90	0	0
VOLATILE ORGANIC CONTENT LESS WATER, EPA 450, VOC LESS WATER & EXEMPT-THEO. METH. (g/L)	90	0	0

GOVERNMENT SPECIFICATION NUMBER WS 3490
 GOVERNMENT SPECIFICATION NUMBER WS 17351
 GOVERNMENT SPECIFICATION NUMBER WS 11539
 GOVERNMENT SPECIFICATION NUMBER MIS 20163
 GOVERNMENT SPECIFICATION NUMBER WS 11540

APPLICATION AND EQUIPMENT SUGGESTIONS

Suitable two part metering and mixing equipment is available. Contact your H.B. Fuller representative for suggested application equipment to suit your specific needs.

DIRECTIONS FOR USE

SURFACE PREPARATION: Surfaces must be clean, dry and free from grease, oil, wax, weak oxide films and other surface contaminants. Chemical etching, sanding or grit blasting often give the best results.

PROPORTIONING AND MIXING: Just prior to using, blend the two components, Part A and Part B, in the ratio above. Stir the two components together thoroughly, being certain to scrape in all material from the walls and bottom of the mixing container. Materials can be hand stirred. Mechanical mixing is preferable, but should be carried out at slow speeds (about 300 rpm), taking as little air as possible into the adhesive batch.

APPLICATION: Spread a thin layer of the mixed adhesive on one or both of the parts to be bonded. Once the adhesive is applied, no open times in necessary. The surfaces can be assembled immediately. Parts should be assembled while to adhesive is still wet to the touch and before it sets. The individual parts, the ambient temperature as well as the adhesive itself will dictate the open time permitted.

CURE SCHEDULE: 10 – 14 days at 77°F, 3 – 4 hours at 158°F*, 1 – 2 hours at 200 °F*

* Allow additional time for parts to warm up to curing temperature.

PERFORMANCE CHARACTERISTICS

Lap Shear Tensile Strength	Rigid Ratio	Flexible Ratio
-67°F	3,275 psi	3, 950 psi
77°F	4, 575 psi	5, 200 psi
180°F	1, 500 psi	700 psi
After 30 days @ 95% RH, 120°F	2, 750 psi	1, 700 psi
After 7 days imm. In std. Test F1. #3	4, 150 psi	5, 200 psi
Climbing drum Peel, lbs./in.width	13	12
Average Peel Torque, lbs. /in. width	6.5	6
T-Peel (MMM-A-132), lbs. /in. width	1.5	1.5
Cleavage Strength, lbs. /in. width	1, 050	1, 250
Heat Deflection Temperature	147°F	114°F
Compressive Strength	19, 300 psi	18, 600 psi
Hardness: Shore D	70 – 85	65 – 80
Flexural Strength	9,400 psi	11, 200 psi
Izod Impact, ft. lbs. / in. width	0.45	0.7
Coefficient of Linear Thermal Expansion	48 x 10 exp -6	--

STORAGE AND HANDLING

Use good personal hygiene. Avoid eye and skin contact. Wash contaminated clothing before reuse. Store material in closed container in a cool, dry place. The shelf life of this product is as specified under the "Typical Physical Properties and General Information" section from date of shipment; when stored under the conditions stated on this technical data sheet.

If crystallization occurs in the containers of this product's part A, warm the product to 120°F to 140°F and it will return to its original liquid state. However, stir before using.

CAUTION

Strong sensitizer. Eye and skin irritant. Vapors harmful. Consult the container label and Material Safety sheets for additional cautionary information before using.

7/2008