

TECHNICAL DATA SHEET

RESIWELD (R) ADHESIVE

DESCRIPTION

Most versatile two component adhesive in our line. Translucent, amber in appearance. Bonds to most metals and rigid plastics, (including Delrin ®), 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 (day)	365	365	
SOLID CONTENT (NON-VOLATILES), TMWB052, SOLIDS (percent)	100	100	100
VISCOSITY, TMTS001, VISCOSITY (cP)	3,500	5,000	
VISCOSITY, TMTS001, VISCOSITY (INITIAL MIXED) (cP)			13,500
VOLATILE ORGANIC CONTENT (VOC), EPA 450, VOC AS IS - THEORETICAL METHOD (g/L)		0	0
VOLATILE ORGANIC CONTENT LESS WATER, EPA 450, VOC LESS WATER & EXEMPT-THEO. METH. (g/L)		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, paint, wax and 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 time is necessary. The surfaces can be assembled immediately. Parts should be assembled while the 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 77F
3-4 hours at 158F*
1-2 hours at 200F*

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

PERFORMANCE CHARACTERISTICS

Lap Shear Tensile Strength	Rigid Ratio	Flexible Ratio
-67F	3,275 psi	3,950 psi
77F	4,575 psi	5,200 psi
180F	1,500 psi	700 psi
After 30 days @ 95% RH, 120F	2,750 psi	1,700 psi
After 7 days imm. in std. Test Fl.#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 a 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 120F to 140F 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 Data Sheets for additional cautionary information before using.

LIMITED WARRANTY AND TERMS

H.B. Fuller Company ("Fuller") warrants that, for a Warranty Period of one year (or the period specified on the applicable Technical Data Sheet, whichever is less) from the date of shipment from Fuller to the Initial Purchaser, that this Fuller product was manufactured in accordance with Fuller's specifications in effect on the date of manufacture. These specifications are available upon request. This Warranty does not cover test data, or any defects, damages or other harms caused to any extent or in any way by failure to follow applicable Fuller instructions, if any, or abuse or misuse of the product.

WARRANTIES DISCLAIMED -- THE WARRANTY STATED IN THE PARAGRAPH ABOVE IS IN PLACE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. Fuller EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ALTHOUGH Fuller MAY HAVE SUGGESTED THE PRODUCT OR DEVELOPED THE PRODUCT AT THE PURCHASER'S REQUEST, IT IS THE PURCHASER'S RESPONSIBILITY TO TEST AND DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE PURCHASER'S INTENDED USE AND PURPOSE, AND PURCHASER ASSUMES ALL RISK AND LIABILITY WHATSOEVER REGARDING SUCH SUITABILITY.

LIMITATIONS OF REMEDIES AND DAMAGES -- FOR ANY VALID CLAIM PRESENTED UNDER THE LIMITED WARRANTY, Fuller WILL REPLACE THE PRODUCT, OR AT ITS OPTION, REFUND THE PURCHASE PRICE. THIS REPLACEMENT/REFUND REMEDY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST Fuller. THE PURCHASER AGREES THAT NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO PURCHASER FOR CLAIMS ARISING OUT OF ANY USE OF THE PRODUCT REGARDLESS OF THE LEGAL THEORY (CONTRACT, TORT OR OTHER). IN NO EVENT WILL Fuller BE OBLIGATED TO PAY DAMAGES TO PURCHASER IN ANY AMOUNT EXCEEDING THE PRICE THAT THE PURCHASER PAID FOR THE PRODUCT.

LIMITATION OF ACTIONS AND VENUE -- Any claim made or action commenced by Purchaser under Fuller's limited warranty as set forth herein must be brought within one year from the date of shipment from Fuller to the Purchaser. Purchaser agrees that all disputes arising from Fuller's sale of product to Purchaser shall be brought, if at all, in and before a court located in the State of Minnesota, to the exclusion of the courts of any other state.

CONDITIONAL ACCEPTANCE -- Fuller's acceptance of Purchaser's order for this product is expressly conditional on Purchaser's assent to terms and conditions set forth herein.

ADEQUATE TESTS: The information contained in this bulletin we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be made in your laboratory or plant to determine if this product meets all of your requirements.