

AKRON, NEW YORK PLANT FORMULA
(TENTATIVE TRIAL FORMULA FOR WILMINGTON PLANT ONLY)

Laminating Compound # 987

Description of Product - For use in laminating radiant heat panels only.

FORMULA

<u>Raw Material</u>	<u>Source</u>	<u>R.M. Spec.#</u>	<u>%</u>	<u>Lbs./Batch</u>
K. B. Flour	Knfler-Bates Co.		15.00	600.00
Tri-Sodium Phosphate	Open Market		2.00	80.00
Lime - High calcium	Open Market		1.60	64.00
Vancide 51Z	R. T. Vanderbilt	126	0.10	4.00
Kaysoy 200C	Archer-Daniels-Midland	122	3.00	120.00
Casein 100M	Paul A. Dunkel	10	5.50	220.00
Limestone	Thompson-Weinman		72.625	2905.00
Kerosene	Open Market		0.10	4.00
Cottonseed Oil	Open Market		0.025	1.00
Nalco 71D5	Nalco Chemical		0.05	2.00
			100.00	4000.00

Spreading Consistency - This is a high alkalinity compound. To determine the proper consistency, mix at a rate of 100 grams to 150 cc water, adding the dry powder slowly with continuous stirring. This procedure should take from 30 to 60 seconds. The laminating compound should mix to about the consistency of a thick pour. Cover with a damp cloth and allow the moisture to soak for 10 minutes. Upon remixing, it should be of thinner consistency and the glue to be spread easily by means of a comb type spreader; the ridges formed by the spreader not self-leveling or sagging when the board is held in a vertical position.

<u>Specifications:</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	150	120	135

Alkalinity - After the glue has been reduced to the correct consistency, test for pH by means of the Beckman pH meter. The electrodes used should be capable of accurately indicating pH readings in excess of pH 12.

<u>pH Specifications</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	12.0	11.0	11.5

Bond Test - The glue shall be applied to a foot square area by means of the comb type spreader. The spreader shall have triangular notches 3/16" wide x 3/16" deep, spaced 3/4" on centers. Place two .025 shims parallel and on board shall be placed backside down onto the application of glue and shims. The next day the 4 inch square piece of board shall be pryed loose by means of a broadknife. There shall be no glue failure, rather a delamination of the board paper or a fracture of the board itself to indicate satisfactory bond.

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LAMINATING COMPOUND

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November 3, 1969
Supersedes No. 987
Dated 8/22/69

AKRON, NEW YORK PLANT FORMULA

READY MIX LAMINATING COMPOUND AK-987

DESCRIPTION OF PRODUCT: For use in laminating radiant heat panels only.

FORMULA:

<u>Raw Material</u>	<u>Function</u>	<u>R.M. Spec.</u>	<u>Percent</u>	<u>Lbs/Batch</u>
Polyvinyl Acetate Emulsion (Elvacet 81-900)	Adhesive	185	35.0	1400
Benzoflex 50	Plasticizer	183	7.0	280
Water	Solvent	-	31.95	1278 (71 gal)?
Napco 22 72 R	Wetting agent	-	1.0	40
Filler Ak-980-X	Filler		25.05	1002.
				** 4000.

**One batch yield 100 $\pm$ one five gallon pails of Ready Mix Joint Compound at 40 lbs/pail.

PREPARATION:

Note - order of addition is important. Add ingredients in the order indicated above. Ensure that the Polyvinyl acetate emulsion and Benzoflex are adequately mixed before adding water. Finally, ensure the complete liquid medium is well mixed before adding the Filler. Mix compound for a minimum period of 12 minutes before adjusting for viscosity.

WORKING CONSISTENCY:

Specifications:

Brabender

Refer to Plant Testing Procedure No. 32.
If paste is not of proper working consistency, adjust by adding water.
200 $\pm$ 20

WORKING PROPERTIES:

Specifications:

Compound shall be free of any coarse, gritty, or undispersed particles. Material shall be free from lumps due to uncomplete mixing.

BONDING PROPERTIES:

Specifications:

Refer to Plant Testing Procedure No. 35.
After compound has dried tape shall show at least 75% fiber lead.

EDO:dek

SGP 0018355

August 22, 1969
Supersedes Formula No. AK-987
Dated May 6, 1969

AKRON, NEW YORK PLANT FORMULA

LAMINATING COMPOUND

987

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<u>FORMULA</u>			
<u>Raw Material</u>	<u>R. M. Spec.</u>	<u>Percent</u>	<u>Lbs./Batch</u>
-/ K. B. Flour		15.00	600.00
-/ Tri-Sodium Phosphate		2.00	80.00
-/ Lime-High Calcium		1.60	64.00
-/ Vancide 51Z	126	0.10	4.00
-/ Kaysoy 200C	122	3.00	120.00
-/ Casein 100M	10	5.50	220.00
-/ Limestone		72.625	2905.00
-/ Kerosene		0.10	4.00
-/ Cottonseed Oil		0.025	1.00
-/ Defoamer M111-antifoaming agent 196		0.05	2.00
		100.00	4000.00

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		150	120	135

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EDO:dek

SGP 0018356

#126

**AKRON FORMULA #987
ASBESTOS CONTAINING PRODUCTS**