

AKRON, NEW YORK, PLANT FORMULA
DRYWALL ADHESIVE AK-502

DESCRIPTION

- Drywall stud adhesive

FORMULA

<u>Raw Material</u>	<u>Function</u>	<u>RM Spec.</u>	<u>Percent</u>	<u>Lbs./Batch</u>
Water	Solvent		12.0	617.0 (74 gals.)
Calgon-T	Wetting Agent	11	0.1	5.0
Ethylene Glycol	Solvent	182	3.0	154.0 (16.6 gals.)
Advawet-33	Wetting Agent		0.9	46.0 (5.5 gals.)
Atomite Limestone	Filler	220	27.0	1398.5
Clay BPG3	Filler		9.0	462.0
Asbestos SG210	Filler		0.8	41.0
Resin EB-12	Adhesive		8.0	410.0 (55 gals.)
Emulsion RA-315	Adhesive	217	30.0	1541.0 (173.0 gals.)
Propasol	Filming Agent		1.0	51.0 (7.0 gals.)
Dibutyl Phthalate	Plasticizer		0.8	41.0 (4.7 gals.)
Water	Solvent		2.8	144.0 (17.3 gals.)
Acrysol ASE-60	Thickening Agent		3.8	195.0 (22.4 gals.)
AMP-95	pH Buffer	225	0.5	26.0 (3.3 gals.)
Biocide 290	Fungicide		<u>0.3</u>	<u>1.5</u>
			100.0	5133.0

YIELD

- One batch yield 480 gals.

MIXING PROCEDURE

- 1) Add water (first addition) Calgon-T, Ethylene Glycol and Advawet 33.
- 2) Add Atomite, Clay, Asbestos and mix for 30 minutes
- 3) Add the following ingredients allowing each ingredient to be thoroughly blended before addition of the next ingredient:
Resin EB-12
Emulsion RA-315
Propasol
Dibutyl Phthalate
- 4) Add water (second addition) and Acrysol ASE-60 (may be added simultaneously)
- 5) Add AMP 95
Biocide-290

Lehnert 10.3.01-87

PLAINTIFF'S EXHIBIT

GP-2285

SGP 0016188

A-X2

VISCOSITY

- Refer to Plant Testing Procedure No. 109

Specifications: 460 $\pm$ 10 Brabender unit

Brabender Viscosity 480 $\pm$ 10. Viscosity can be adjusted by addition of water, reduction of mix water, or by addition of ASE-60 in small amounts. It is best to hold back a small amount of water to be added if the viscosity is too high. ASE-60 may be added to thicken the mix should too much water have been added. Should it be necessary to add ASE-60, the pH must again be checked since ASE-60 is acidic and its addition will lower pH. Remember, changes in the water content affect flow properties as well as the wet density.

WORKING CHARACTERISTICS: Shall extrude easily from tube and form a uniform bead that does not sag or run.

OPEN TIME

- Refer to Plant Testing Procedure No. 114

WETTING CHARACTERISTICS: Refer to Plant Testing Procedure No. 115

TENSILE STRENGTH

- Refer to Plant Testing Procedure No. 116

ALKALINITY

- Refer to Plant Testing Procedure No. 34. Adjust with small quantities of AMP

Specifications:	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	8.0	7.7	7.9

DENSITY

Specifications: 10.75 lbs./gal 10.65 lbs./gal 10.7 lbs./gal

Case weight should be 35 lbs. $\pm$ 1 lb.

EDO:elz

Lehnert 10.3.01-88

SGP 0016189

A 83a

August 15, 1972
Supersedes AK-502
Dated 1/28/72

AKRON, NEW YORK, PLANT FORMULA
DRYWALL ADHESIVE AK-502

DESCRIPTION

- Drywall stud adhesive

FORMULA

<u>Raw Material</u>	<u>Function</u>	<u>RM Spec.</u>	<u>Percent</u>	<u>Lbs./Batch</u>
Water	Solvent		12.0	617.0 (74 gals.)
Calgon-T	Wetting Agent	11	0.1	5.0
Ethylene Glycol	Solvent	182	3.0	154.0 (16.6 gals.)
Advawet-33	Wetting Agent		0.9	46.0 (5.5 gals.)
Atomite Limestone	Filler	220	27.0	1398.5
Clay BPG3	Filler		9.0	462.0
Asbestos SG210	Filler		0.8	41.0
Resin EB-12	Adhesive		8.0	410.0 (55 gals.)
Emulsion RA-315	Adhesive	217	30.0	1541.0 (173.0 gals.)
Propasol	Filming Agent		1.0	51.0 (7.0 gals.)
Dibutyl Phthalate	Plasticizer		0.8	41.0 (4.7 gals.)
Water	Solvent		2.8	144.0 (17.3 gals.)
Acrysol ASE-60	Thickening Agent		3.8	195.0 (22.4 gals.)
AMP-95	pH Buffer	225	0.5	26.0 (3.3 gals.)
Biocide 290	Fungicide		0.3	1.5
			100.0	5133.0

YIELD

- One batch yield 480 gals.

MIXING PROCEDURE

- 1) Add water (first addition) Calgon-T, Ethylene Glycol and Advawet 33.
- 2) Add Atomite, Clay, Asbestos and mix for 30 minutes
- 3) Add the following ingredients allowing each ingredient to be thoroughly blended before addition of the next ingredient:

Resin EB-12
Emulsion RA-315
Propasol
Dibutyl Phthalate
- 4) Add water (second addition) and Acrysol ASE-60 (may be added simultaneously)
- 5) Add AMP 95
Biocide-290

Lehnert 10.3.01-89

SGP 0016190

A-84

-/ VISCOSITY - Refer to Plant Testing Procedure No. 109

Specifications: 430 to 460 Brabender unit

-/ Brabender Viscosity 430 to 460 Viscosity can be adjusted by addition of water, reduction of mix water, or by addition of ASE-60 in small amounts. It is best to hold back a small amount of water to be added if the viscosity is too high. ASE-60 may be added to thicken the mix should too much water have been added. Should it be necessary to add ASE-60, the pH must again be checked since ASE-60 is acidic and its addition will lower pH. Remember, changes in the water content affect flow properties as well as the wet density.

WORKING CHARACTERISTICS: Shall extrude easily from tube and form a uniform bead that does not sag or run.

OPEN TIME - Refer to Plant Testing Procedure No. 114

WETTING CHARACTERISTICS: Refer to Plant Testing Procedure No. 115

TENSILE STRENGTH - Refer to Plant Testing Procedure No. 116

-/ ALKALINITY - Refer to Plant Testing Procedure No. 34. Adjust with small quantities of AMP

Specifications:	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	8.3	7.7	8.0

-/ DENSITY

Specifications: 11.00 lbs./gal 10.75 lbs./gal 10.85 lbs./gal

Case weight should be 35 lbs. $\pm$ 1 lb.

EDO:elz

-/ Denotes change

Lehnert 10.3.01-90

SGP 0016191

A-84a

September 25, 1972
Supersedes AK-502
Dated 8/15/72

AKRON, NEW YORK, PLANT FORMULA
DRYWALL ADHESIVE AK-502

DESCRIPTION - Drywall stud adhesive

-/ FORMULA

<u>New Material</u>	<u>Function</u>	<u>RM Spec.</u>	<u>Percent</u>	<u>Lbs./Batch</u>
Water	Solvent		12.0	617.0 (74 gals.)
Calgon-T	Wetting Agent	11	0.1	5.0
Ethylene Glycol	Solvent	182	3.0	154.0 (18.6 gals.)
Advocat-33	Wetting Agent		0.9	46.0 (5.5 gals.)
Atomite Limestone	Filler	220	27.0	1393.5
Clay 3PG3	Filler		9.0	462.0
Asbestos SG210	Filler		0.8	41.0
Resin ES-12	Adhesive		8.0	410.0 (55 gals.)
Emulsion Elvace 1873	Adhesive	217	30.0	1541.0 (173.0 gals.)
Propasol	Filming Agent		1.0	51.0 (7.0 gals.)
Dibutyl Phthalate	Plasticizer		0.5	25.0 (3.1 gals.)
Water	Solvent		2.8	144.0 (17.3 gals.)
Acrysol ASE-60	Thickening Agent		3.6	195.0 (22.4 gals.)
AMP-95	pH Buffer	225	0.5	26.0 (3.3 gals.)
Biocide 290	Fungicide		0.3	1.5
			100.0	5133.0

YIELD - One batch yield 480 gals.

MIXING PROCEDURE

- 1) Add water (first addition) Calgon-T, Ethylene Glycol and Advocat 33.
- 2) Add Atomite, Clay, Asbestos and mix for 30 minutes
- 3) Add the following ingredients allowing each ingredient to be thoroughly blended before addition of the next ingredient:
Resin ES-12
Emulsion RA-315
Propasol
Dibutyl Phthalate
- 4) Add water (second addition) and Acrysol ASE-60 (may be added simultaneously)
- 5) Add AMP 95
Biocide-290

Lehnert 10.3.01-91

-/ denotes change

EDC:elz

SGP 0016193

A-86