

HIGHWAY RESEARCH CIRCULAR

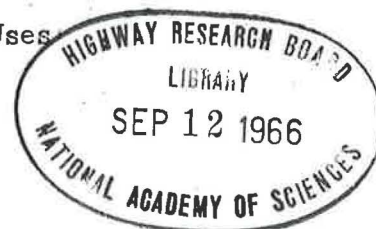
Number 33

Subject Classification: General Materials
Maintenance

July 1966

COMMITTEE ACTIVITY

Committee on Adhesives, Bonding Agents and Their Uses
Department of Materials and Construction
Highway Research Board



CONSUMPTION OF EPOXIES AND POLYSULFIDES BY HIGHWAY DEPARTMENTS AND OTHER AGENCIES

At the time of formation of this committee, it was assigned the following scope: to suggest, formulate, plan, encourage, correlate, and evaluate research concerning adhesives, bonding agents and their uses; to conduct scientific, impartial, fact-finding surveys of national scope, to prepare compilation of current practices and recommended practices.

As an initial step in pursuing these assignments, the committee conducted a national survey concerning adhesives, bonding agents, and their uses in highway construction and maintenance. This survey has provided valuable information on the future needs for and the research activities in sealants, adhesives, and bonding agents.

To assist those in the highway field interested in the research and the present and future use of these materials, the results of the survey are summarized in two tables on the following pages.

Studies of the survey data are underway by the committee to detect needed research areas as well as to establish basis for reports and for formal papers which may be of interest in the field of Highway Construction and Maintenance.

ACKNOWLEDGEMENTS

The summary tables in this article were compiled from the survey questionnaires by Mr. Ray Schutz, MC-D5 committee member.

The preparation of the questionnaire forms used in conducting the two surveys which were made and the correlation of survey data studies are the responsibility of sub-committee MC-D5(3), J.A. Shelby, Sub-committee Chairman.

TABLE I

HIGHWAY DEPARTMENTS AND AGENCIES

YEARLY GALLON CONSUMPTION OF EPOXIES & POLYSULFIDES

1. Alabama	- 100 to 5000 gals of A & S
2. Alaska	- 0 to 100 gals
3. California	- 100 to 5000 gals of A & BA
4. Colorado	- 0 to 100 gals of A, BA & S
5. Delaware	- 100 to 5000 gals of A
6. Florida	- 100 to 5000 gals of A, BA & S
7. Georgia	- 100 to 5000 gals of S
8. Hawaii	- 0 to 100 gals
9. Illinois	- 100 to 5000 gals
10. Indiana	- 0 to 100 gals
11. Kansas	- 100 to 5000 gals of A, BA & S
12. Kentucky	- 5000 to 10,000 gals of A, BA & S
13. Louisiana	- 100 to 5000 gals
14. Maine	- 100 to 5000 gals of BA & S
15. Maryland	- 100 to 5000 gals of S
16. Massachusetts	- 0 to 100 gals
17. Michigan	- 100 to 5000 gals of A & S
18. Minnesota	- 0 to 100 gals of A, BA & S
19. Mississippi	- 0 to 100 gals
20. Missouri	- Over 10,000 gals of A & S
21. Nebraska	- 0 to 100 gals of A, BA & S
22. Nevada	- 0 to 100 gals
23. New Hampshire	- 100 to 5000 gals of A, BA & S
24. New Mexico	- 0 to 100 gals
25. New York	- 5000 to 10,000 gals of A, BA, & S
26. No. Carolina	- 0 to 100 gals of BA & S
27. No. Dakota	- 100 to 5000 gals
28. Ohio	- 0 to 100 gals
29. Oregon	- 100 to 5000 gals of A & BA
30. Pennsylvania	- 5000 to 10,000 gals of BA & S
31. So. Dakota	- Over 10,000 gals of A & BA
32. Texas	- 100 to 5000 gals of A & BA
33. Vermont	- 0 to 100 gals
34. Virginia	- 5000 to 10,000 gals of S
35. Washington	- 100 to 5000 gals
36. Wisconsin	- 0 to 100 gals
37. Wyoming	- 0 to 100 gals
38. Ill. St. Toll Hwy Comm.	- 100 to 5000 gals of BA & S
39. N.J. Tpk. Auth.	- Over 10,000 gals of S
40. P.O.N.Y.A.	- 100 to 5000 gals
41. Ohio Tpk. Comm.	- 100 to 5000 gals of S
42. Wash. D.C. Hwy Dept.	- 100 to 5000 gals of BA
43. Wash. Div. of Toll Fac.	- 100 to 5000 gals

KEY: A - Adhesives
BA - Bonding Agents
S - Sealants

TABLE II

SUMMARY OF EPOXY CONSUMPTION

BY HIGHWAY DEPARTMENTS & OTHER AGENCIES

AGENCIES	1	2	3	4	5	6	7	8	9	10	11	12
California	A C		A B		A B	A C	A B	B				A B
Florida				A			A					B
Georgia	C	C	C			C	C	C	C	C		
Illinois	B				B			B			B	
Indiana	A C				A					A		A
Kansas	ABC				ABC		B					B
Kentucky	A B		B C	C	A B							A B
Louisiana					B		B	B		B		B
Maine	ABC	ABC			ABC	C		C				ABC
Maryland	B C	A	B	C	B				B	B	B	B
Michigan	ABC	A C	B	B C						B	A C	ABC
Nebraska	A B	C			B	C	B	C	B	B		B
N.Hampshire	B C				B C	B C			B C			B C
New York	ABC			ABC		A C				B		B
Oregon	B C				B							
Penn.	ABC				A C							B C
So.Dakota	B C	B C			B C							B C
Texas	A B				B		B	B	B			B
Washington	B		C		B		B	B		B		B
Wash. D.C.	A C		C	A C	B C						A	B C
Ill. St.Toll												
Hwy.Comm.		B			B							
P.O.N.Y.A.	ABC	ABC	A C		ABC	B C		B C	B C			ABC
Ohio Tpk.												
Comm.	C	B			C							C
Wash. D.C.												
B.P.R.	A				A		A	A		A		A
Wash. Toll												
Bridge Auth.	C				B C				B C			

KEY:

1. Portland Cement Concrete Surfaces
2. Bituminous Concrete Surfaces
3. Steel Plate Bridge Decks
4. Other Surfaces
5. Bonding New to Old Portland Cement Concrete
6. Shear Connectors between Concrete Bridge
Decks and Girders
7. Placing Traffic Buttons on Pavements
8. Bonding Curbs to Pavements
9. Bonding Metal to Metal or Concrete
10. Grouting Precast Concrete Beams
11. Other Uses, Specify
12. Preparing Grout for Repairing P.C. Concrete.

- A. Research
- B. Current Use
- C. Future Need

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