

DEPARTMENT OF COMMERCE

BUREAU OF STANDARDS

WASHINGTON, D. C.

(August 1, 1923)

TESTS ON ASBESTOS & RUBBER SHEET PACKING

This material was submitted to the Bureau for the purpose of obtaining data which would be of value in considering the specifications for this type packing.

The enclosed photostat shows the results of the comparative tests on various makes of this packing. Tests were also made after the material had been aged in an electric oven at 70°C for 7 days and 14 days to determine whether or not this kind of test would be an indication of deterioration due to aging, as it is in rubber goods. After 14 days a marked difference in the tensile strength is noticed in most every case.

The compression tests were made with a ring die as shown on the blue prints. The area of the ring in contact with the packing is one square inch and the compression takes place between the ring and a flat steel surface.

The tensile strength tests were made using test pieces cut with a $1\frac{1}{2}$ " die, 3" gage length, and with a speed of separation of the grip of 13 inches per minute.

The packing submitted by you may be identified by the following Lab. No.

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
LABORATORY OF PHYSICAL CHEMISTRY
CHICAGO, ILL.
REPORT ON THE PROGRESS OF WORK

This laboratory was organized in the year 1892, and since that time has been engaged in a study of the physical properties of matter, particularly of the liquid and solid states. The work has been carried on in a systematic and thorough manner, and the results have been published in a number of papers and reports. The following is a summary of the work done during the year 1895.

The first part of the work was devoted to a study of the properties of the liquid state. The critical temperature and critical pressure of a number of substances were determined, and the results compared with those of other investigators. The heat of vaporization and the latent heat of fusion were also determined for a number of substances, and the results compared with those of other investigators.

The second part of the work was devoted to a study of the properties of the solid state. The melting points of a number of substances were determined, and the results compared with those of other investigators. The heat of fusion and the latent heat of fusion were also determined for a number of substances, and the results compared with those of other investigators.

The third part of the work was devoted to a study of the properties of the gaseous state. The critical temperature and critical pressure of a number of substances were determined, and the results compared with those of other investigators. The heat of vaporization and the latent heat of fusion were also determined for a number of substances, and the results compared with those of other investigators.

The fourth part of the work was devoted to a study of the properties of the crystalline state. The melting points of a number of substances were determined, and the results compared with those of other investigators. The heat of fusion and the latent heat of fusion were also determined for a number of substances, and the results compared with those of other investigators.

The fifth part of the work was devoted to a study of the properties of the amorphous state. The melting points of a number of substances were determined, and the results compared with those of other investigators. The heat of fusion and the latent heat of fusion were also determined for a number of substances, and the results compared with those of other investigators.

2919	Keasby & Mattison	(Rhinceros)		J.M. Weaver, Ambler, Pa.
2919 A.	"	"	(Graphited)	
2977	Dominion A. & R. Co.	(Sovereign)		New York
2978	"	"	"	" "
2979	"	"	"	" "
			(Flangetite)	
3131	General A. & R. Co.	(Pyroid-Formula 4)		Mr. S.L. Jenkins
3132	"	"	"	Charleston, S.C.
			"	"
			"	"
3239	Raybestos Co.	#103		Bridgeport, Conn.
3240	"	"	#503	" "
3241	"	"	#1503	" "

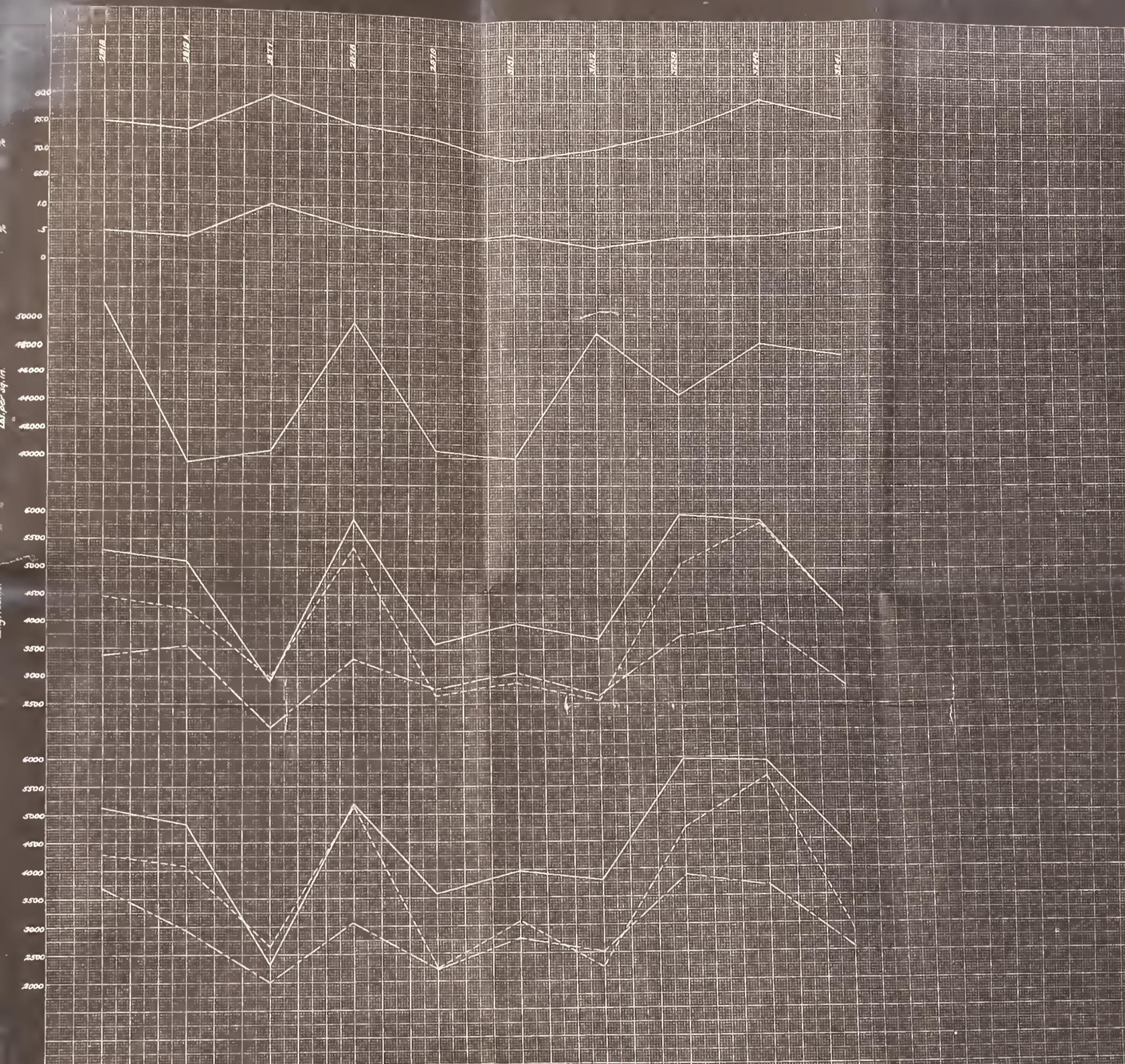


*For compression
test of rubber and
asbestos sheet
packing*

*To be made of
machine steel*

Scale - $\frac{1}{2}$ size

Bureau of Standards



As received
After heating in an electric oven for 1 day @ 70°C.
After heating in an electric oven for 14 days @ 70°C.

