BC 015650

APPROVALS

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June 21, 1938.

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Sheet 1 OBSOLETE

PROCESS SPECIFICATION

ARMSTRONG'S ASPHALT CEMENT
ARMSTRONG'S PAVING CEMENT
Code 75

FORMULA:		Pounds	Per Cent	Parts
Steam distilled asphalt, 75 pen.	(Par.5;Sec.A-21)	2000	47.8	1.000
Xylol " (75 gallons)	(Par.5;Sec.A-1)	540	12.8	.267
A.P. asbestos	(Par.5;Sec.A-3)	1660	39.6	.840
Output (420 gallons)		4200		
Net weight per gallon (Est)		10		

The solvent charge may be varied from 74 to 78 gallons per batch to obtain the correct consistency.
When using straight asphalt a formula proportional to the above charge may be used. When the net asphalt charge is weighed, the xylol and asbestos charge are calculated.

Minimum net size size container	Net pounds	Gross pounds
1 gallon	10	11
5 gallon	50	55
50 gallon	300	333

PROCESS:

	Approximate time required
1. Adding xylol to dissolver	5 min.
2. Adding asphalt to dissolver	30 min. from tank car, 8 hours from drums.
3. Adding additional solvent to dissolver	
4. Adding asbestos to dissolver	30 min.
5. Mixing	30 min.
6. Testing	15 min.
7. Drawing off	60 min.
8. Analysis	
9. Geographical Hazards	

1. ADDING XYLOL TO DISSOLVER

A. Tank car asphalt - The required charge of xylol is metered into the dissolver.

B. Drummed asphalt - Forty-five gallons of xylol is metered into the dissolver.

2. ADDING ASPHALT TO DISSOLVER

A. Tank car asphalt - The required charge of asphalt is pumped into the dissolver. The asphalt temperature when entering the dissolver should not be over 200° F. The temperature is measured by a gauge placed in the dissolver.

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B. Drummed Asphalt - Approximately 2000 pounds of asphalt is melted on the steam wells and charged into the dissolver. It is not possible to charge a predetermined quantity of asphalt by this method, but the exact quantity charged is obtained by subtracting the tare weight of the drums from their original gross weight.

3. ADDING ADDITIONAL SOLVENT TO DISSOLVER

A. Sufficient xylol is added to the dissolver so that the total solvent charge corresponds to the charge required for the particular net weight of asphalt in the batch.

4. ADDING ASBESTOS TO DISSOLVER

A. The required quantity of asbestos is weighed into the asbestos chute which discharges the filler into the dissolver.

5. MIXING

A. A mixing period is allowed to incorporate the filler.

6. TESTING

A. The cement is tested for fluidity before being drawn off. (See Laboratory Control Specification C-48).

B. Tank Car Asphalt - In case the cement is thinner than required, additional asphalt is pumped into the dissolver, the batch allowed to mix for fifteen minutes and another test taken.

C. Drummed Asphalt - In case the cement is thinner than required, additional asbestos shall be added to the dissolver, the batch allowed to mix for fifteen minutes, and another test taken.

D. Tank Car or Drummed Asphalt - In case the cement is thinner than required, additional xylol shall be added and the batch allowed to mix for fifteen minutes before drawing off or retesting.

7. DRAWING OFF

A. The cement is drawn off into one, five and thirty gallon containers.

8. EQUIPMENT

A. Dissolvers - Two dissolvers, each with a capacity of 400 gallons, 8 ft. deep x 4 ft. diameter, extending midway through the second floor of the asphalt products building are used for dissolving the asphalt. A 3" rotary Kinney pump, operated by a 3 H.P. motor is used to pump liquid asphalt from tank cars to the dissolvers through 2" steam-jacketed lines.

B. Solvent Storage - Xylol is stored in a 1000 gallon tank buried underground outside of the asphalt products building. The solvent is pumped through a Bowser liquid meter into the dissolvers.

C. Asbestos Hopper - A portable hopper is mounted on a transverse and can be placed at the side of either dissolver in order to charge the filler.

D. Scales - One pair of Howe platform scales is located on the second floor for weighing filler.

9. OCCUPATIONAL HAZARDS

A. Possible Hazards

1. Poisoning from xylol fumes
2. Asbestosis

B. Means Used to Safeguard

1. The asphalt products building is equipped with an efficient exhaust and ventilating system to remove dust and vapors.

2. The use of respirators is required when charging asbestos.

(a) The respirators used must bear the approval of the U.S. Bureau of Mines for Type A (Dust) respirators.

3. All new employees hired permanently or employees being permanently transferred from another department to this operation, must pass a suitable medical examination which shall include a chest X-ray and must be declared by a physician to be in a suitable physical condition for work at this operation. New employees hired temporarily for this operation for a period of not over three months shall not require a chest X-ray examination, but must pass a regular medical examination.

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April 18, 1939.

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PLANT LABORATORY	[illegible]	DATE [illegible]
PLANT SCHEDULE DEPARTMENT	[illegible]	DATE 4-29-38
PLANT INDUSTRIAL ENGINEER	[illegible]	DATE [illegible]
INSPECTION MANAGER	[illegible]	DATE 4-10-38
ASST. GEN. SUPERINTENDENT	[illegible]	DATE 4-30-38
GENERAL SUPERINTENDENT	[illegible]	DATE [illegible]
SUBS. COST SECT. (FACT.)	[illegible]	DATE [illegible]
SUBS. OF PRODUCTION OFFICE	[illegible]	DATE [illegible]
CENTRAL SCHEDULE DEPARTMENT	[illegible]	DATE [illegible]
SUBS. COST SECT. (LAND.)	[illegible]	DATE [illegible]
DIVISION MANAGER	H. R. Peck	DATE [illegible]
CENTRAL TECHNICAL LABORATORY	[illegible]	DATE [illegible]
SUBS. OF PRODUCTION OFFICE	[illegible]	DATE [illegible]

DATE ISSUED May 20, 1938 - Photostat

SPECIFICATION CHANGE [illegible]

[illegible]

Please obsolete Process Specification Changes dated April 1, 1938 and September 18th, 1940.

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