MONSANTO
CANADA LIMITED

FROM J A Overing
TORONTO, Ontario

DATE October 5, 1971

SUBJECT SANTICIZER 711

REFERENCE Monsanto Oakville

TO J H Brydon - Montreal

cc: J G Edmiston - Toront
H F Dixon Montre
L D Press St Lou
J Lilly "
W Schalk "
M Medgessy Oakvil
R V Todd "
T Corpe "
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R A Fenn "
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File - Chem

D Press and the writer made a call to observe a trial on SANTICIZER 711 re GM's T9012, based on the results obtained by lab work in Oakville and St Louis.

These trials were conducted as in the report of Sept. 15/71, with the exceptions listed below.

1. OPALON 670 resin was used instead of the 20 parts Esso 366/80 parts Esso 369. The reason was that Oakville has a lipping problem when using the 80/20 blend that they can rectify with OPALON 670.

2. Temperatures on the drop mill were raised:
   Front Roll Raised 5°F
   Back Roll " 10°F
   Also, the offset roll on the calender was raised 10°F

3. Formulation containing S-711 contained no stearic acid.

The S-1160 using new and old alfol 610 alcohol ran well. The extruder (from the mixing extruder) looked well plasticized and smooth, not dry and gritty as mentioned in the previous report. Similarly, the banks on the calender were smooth and fluid.

The trial using S-711 (without stearic acid) gave an excellent product as well, with no evidence of holes or comet tails. Again, the extrudate and feed mill stock appeared wet and fluid. No sticking was observed on the calenders, with the absence of stearic acid.

It was noted that the Banbury drop time using S-1160 (new alcohol) was recorded at 2 minutes, 20 seconds + 5 SECONDS. With S-711 it was recorded at 2 minutes, 10 seconds +/- 5 seconds.

It appears that the utilization of a higher molecular weight resin (in both cases) allowed a more complete fusion to occur in the banbury; also, the absence of stearic acid in the S-711 formulation helped to gain a more fused product.

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To: J H Brydon Oct 5/71
Re: S-711

RUNNING CONDITIONS

	D514E (S-711 without Stearic Acid)		D514F (S-1160 - New Alcohol)	
	Set	Actual	Set	Actual
Banbury Drop	310°F	315°F	310°F	315°F
Drop Mill				
Frront Roll	340	345	340	350
Back Roll	340	345	340	350
Extrudate		320		320
Feed Mill				
Front Roll	325	335	325	330
Back Roll	320	330	320	330
Calender				
Offset Roll	330	325	330	315
Top Roll	325	325	325	310
Middle Roll	330	325	330	305
Bottom Roll	330	325	330	300

A run was made (10 batches) using the 80/20 blend of Esso Resin and S-711. This was identical to the formulation Oakville had experienced hole problems with in production, except that no stearic acid was added.

The product manufactured showed no evidence of pin holes. Some sticking appeared on the calenders during start-up, but this was cleared up when it was decided to add 0.15 parts of stearic acid. This small addition did not effect the quality of the finished product (no holes).

This test did tend to conclude that the pin hole problem was a result of underfused stock, due to not enough shear being put into the product. Be removing the stearic acid, one was able to develop more work by the processing equipment.

J Overing

JO/ema

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