

*Note present vs. date
with your date
R.K.*

May 13, 1936

Chicle Development Company
500 Fifth Avenue
New York City

Attention -- Mr. S. S. Yates

Gentlemen:

During the past two months we have run a Sharples Supercentrifuge in an experimental way to determine the efficiency of removing "X" from chicle.

We have a Number 6 machine with a special steam heated head. The bowl is heated indirectly by a steam coil inside the frame. The melted chicle is fed into the bowl through a steam jacketed pipe, using 150 pounds air pressure.

At the present time it appears that we may expect a residue or waste of about 1.5%. With three bowls for the centrifuge we estimate a production of 1,000 pounds per hour per machine.

There do not appear to be any difficulties that cannot be overcome. The main trouble is the clogging of the feed nozzle by bark or other foreign matter, which we shall remove by preliminary treatment.

We list below some of the results we have obtained on chicle with different degrees of contamination:

	Through Centrifuge PPM
Blend 43 (1.6)	1.0
Blend 43	1.3
Blend 50, added 220 ppm -- first	1.7
last	2.0
Blend 50 (4.7) added 150 ppm through centrifuge	2.3
Chicle Lot 100, once through	2.3 -- 3.4
twice through	1.7 -- 2.2

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Through Centrifuge
PPM

Chicle Lot 100 (4.7) through	1.7 -- 1.6
Chicle Lot 99 (3.0) through	1.1 -- 1.0
(1.5)	
Chicle Lot 100 (12.) through	2.7
Blend 57 C (3.5) through once	2.1
through twice	1.7
Blend 58 (3.3) through first	1.9
through last	1.7
Blend 60 (3.6) through	1.6 -- 1.1
(7.1)	
Blend 61 (3.2) through	1.0
Blend 62 (2.2)	2.1
Blend 66 (2.4) ?	3.2
Blends 42, 67, 74 (8.0)	1.6
(8.4)	
Blends 65 & 69	2.3
Blend 70) 13.0	1.8
8.6	
Blend 70)	2.3
Blend 70	1.6
Blend 72	2.0
Blend 73 (4.2	2.5
(3.9)	
Blend 74 (8.1 -- 3.6)	1.6
(2.1)	
Blend 75 (3.6 -- 4.2)	2.0
Blend 76 (3.9)	1.2
Blend 78 (5.5)	0.6
Blend 80	Separate runs 1.6
Blend 80 (6.0)	Separate runs 1.8
Blend 80	Separate runs 1.4
Blend 80	Separate runs 1.4

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It is seen from the figures given that it is possible to reduce the "X" content from a high of 220 down to about 2. Also, it is seen that we can reduce from 8 to 13 down to 2 - 2.5. For some reason we cannot reduce the "X" content consistently below 1.5. We have found in several samples that about 0.5 parts are soluble in water. It is quite possible that more is soluble. Also, it is quite possible that some particles are so small that they are not removed by centrifugal force.

Yours very truly,
BEECH-NUT PACKING COMPANY

E. R. Pickett

ERP/JR

JSEllithorp, Jr.

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