

Food Safety and Inspection Service

Mr. Steven C. Beresh Proto Corporation 10500 47th Street North Clearwater, FL 34622

We have received the necessary information to complete our evaluation of several of your PVC jacketing materials.

Your PVC jacketing materials listed below are chemically acceptable for use in slaughtering, processing, transporting, or storage areas in incidental contact with meat or poultry food product prepared under Federal inspection.

LoSmoke Violet LoSmoke Orange

LoSmoke Blue LoSmoke Yellow LoSmoke Green

This acceptance is valid so long as the composition and use of the substance remain as described to us. This letter does not constitute acceptance for materials made wholly or partly from substances accepted herein. No endorsement of the substance or of any concomitant claims is intended. It is the responsibility of the user and/or supplier to determine any regulatory limitations which may apply to their use of this substance.

John M. Damaré

John M. Damaré, Chief Compounds and Packaging Branch Product Assessment Division



2/94 to 9/1/94

eathering Study

Accelerated weathering resistance test methods are very difficult to correlate with the results of end use experience, because there is no such thing as standard outdoor environment which will always give the same results and at the same time be representative of all outdoor aging. The various factors affecting the weathering resistance are location, duration and intensity of sunlight, temperature, moisture, humidity, rain, snow, pollution and many other things.

The most important cause of degradation in most outdoor environments is the UV portion of sunlight, especially in the range of 295-350 nm, peaking at 320nm for PVC. Xenon-arc lamps are used for solar simulation in the spectral region below 500nm. The xenon arc test weather-ometer is a light exposure apparatus with and without water for exposure of plastics. The ΔE value from this represents weathering resistance in form of color change development ΔE value of the standard of the second color which is the second color which is the second color change development ΔE value of less than 1 practically can not be visualized by naked eyes, therefore would be considered excellent especially after 3000 hours [125 days) under xenon-arc lamps-representing approximately five years outdoors.

Note: In the month of Peb 94,an outside lab. was supplied with our LoSmoke sheet samples identifying the cap side to be tested for xenon arc study. They provided the weathering test results on 09/01/94.

Proto: Xenon Arc Accelerated Weathering Study 09/01/94 Proto Corp.

Time (hours)	L	<u>a</u>	<u>b</u>	Δ <u>E</u>	
0 500 1000 1500 2000 2500 3000 Hoves	96.13 96.33 96.17 96.40 96.43 96.43 96.30	-0.68 -0.62 -0.80 -0.79 -0.81 -0.84	0.68 1.02 1.49 1.36 1.30 1.21	0.39 0.83 0.53 0.70 0.62	
30 mil Exposure					ALL AE VALUES ARE LESS THAN 1.
Time (hours)	<u>L</u>	a	Þ	ΔE	COLOR CHANGE(OR YELLOWING) WOULD REMAIN UNCHANGED
0	96.13	-0.68	0.9	-	TO THE NAKED EYE.
500	96.26	-0.63	1.16	0.28	GLOSS FINISH WILL
1000	96.11	-0.81	1.72	0.83	CRADUALLY DULL,
1500	96.28	-0.80	1.25	0.60	JUST AS PAINT DOES
2000	96.38	-0.79	1.38	0.53	
2500	96.39	-0.77	1.30	0.47	
3000 HOVES	96.22	-0.81	1.15	0.28	

THESE RECEIPTS ARE DISPLAYED IN THEIR ENTIRETY FOR THE PURPOSE OF SECURING PRODUCT ACCEPTANCE FROM DULY CONSTITUTED APPROVAL AUTHORITIES, UNDER THE FREEDOM OF INFORMATION ACT. THEIR DISCLOSURE HERE, SHALL NOT BE CONSTRUED AS PUBLICITY OR ADVERTISING BY THE AGENCIES INVOLVED, OR PROTO CORP.



Washington, D.C.

September 10, 1993

Mr. Bill Rerbst

Dear Mr. Herbst:

Equipment such as your \$120 Slipknot Pipe Wrap Tape, also known as Proto White Vinyl Tape is chemically acceptable and may be used in federally inspected meat and poultry plants without a formal letter of acceptance form this office provided:

- 1. It creates no adverse conditions or safety hazards.
- It is installed, maintained, and operated in a manner acceptable to the inspector in charge.

This letter does not imply compliance with Department of Labor Occupational Safety and Health Standards. In addition, it should not be considered an approval of processing methods Any departure from established procedures must be cleared with the Slaughter Inspection Standards and Procedures Division or the Processed Products Inspection Division.

Sincerely Robert J Williams Robert J Williams Industrial Specialist Equipment Branch

Equipment branch Facilities, Equipment and Sanitation Division Science and Technology

United States Department of Agriculture

Food Safety and Inspection Service

April 1, 1993

Mr. Steven C. Beresh Proto Corporation 10500 47th Street North Clearwater, FL 34622

Dear Mr. Beresh:

We have received the necessary information to complete our evaluation of your jacketing material.

Your LoSmoke White is chemically acceptable for use in slaughtering, processing, transporting, or storage areas in incidental contact with meat or poultry food product prepared under Federal inspection.

This acceptance is valid so long as the composition and use of the substance remain as described to us. This letter does not constitute acceptance for materials made wholly or partly from substances accepted herein. No endorsement of the substance or of any concomitant claims is intended. It is the responsibility of the user and/or supplier to determine any regulatory limitations which may apply to their use of this substance.

John D. Damari