

Vinylite Resins

May 4, 1953

CONFIDENTIAL

Mr. Philip C. Boyd
Hartford Accident and Indemnity Company
24 Washington Street
New Britain, Connecticut

Re: 72 C 18274 - Stanley Bastek vs. Jessal Plastics, Inc.
Bakelite 19406 Vinyl Compound

Dear Mr. Boyd:

Mr. Rizzo has referred your letter concerning the above case to this department for reply. The material in question that was being extruded is our Bakelite 19406 Vinyl Compound. We are pleased to give you complete formulations and toxicity data, but we request that you respect this in an entirely confidential manner. The toxicity we give you may be passed on to the necessary parties, but we request that you keep the formulation confidential.

Bakelite 19406 Compound is simply a "Vinylite" resin plasticized with DOP, known as di(2-ethylhexyl) phthalate, and stabilized with Stabilizer D-22, known as tin dilaurate, dibutyl, plus a small amount of Aerawax C acting as a lubricant.

The formulation of this material is as follows and we again ask you to respect this as confidential:

Vinyl resin VINW	67.20%
DOP Plasticizer	30.22%
D-22 Stabilizer	2.00%
Aerawax C lubricant	0.50%

None of the above materials are considered to be a neurotoxin.

The toxicity of all of these materials has been determined by animal range finding tests plus human experience with them.

The VINW vinyl resin is a simple vinyl resin which to the best of our knowledge has never caused any symptoms such as those described by your claimant.

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bl. cc. - Mr. Peter Rizz
Mr. Richard Bruce
Mr. J. D. Benedict
Mr. D. A. Munns

Sakelito, Hartford

Mr. Philip C. Boyd

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The plasticizer DOP, di(2-ethylhexyl) phthalate was used in exposing groups of rats to mists saturated at 170° C. for varying periods of time at our Mellon Institute Laboratories. The vapors from these mists obviously are greatly in excess of those to which human workmen might be exposed. The maximum inhalation periods resulting in no fatalities in the rats as compared with other familiar plasticizers known to have been used with safety by workmen are as follows: glycerine, thirty minutes; paraffin oil, one hour; DOP, di(2-ethylhexyl) phthalate, two hours. These experiments show that DOP possesses health hazards, in single exposures, no greater than those of other materials which are already used without injury to workmen. This material was also fed to groups of five rats for ninety days at varying doses to determine cumulative toxicity and no rat died as a result of the doses. This indicates that DOP does not have great cumulative action. The maximum dose was 1.9 grams per kilogram of body weight per day. There was no neurological injury shown at autopsy. This material was also placed undiluted in the eyes of rabbits and only transient congestion of the eyelids occurred. When applied to human skin in the form of patch tests, left in contact for seven days and then reapplied ten days later on the same spots, no erythema or other reaction resulted at any time. Therefore this material does not show any great sensitizing power on human skin.

The stabilizer D-22, tin dilaurate, dibutyl, likewise showed no neurological toxicity, either on experimental animals or humans. In years of clinical experience with the use of this material at one of our plants, the only effects noted were transient upper respiratory irritation on exposure to an excess of fumes from this material. This did not present a serious toxicity hazard since the symptoms were minor and cleared up rapidly. As noted, there is only two percent of this stabilizer in the formulation used.

Acrawax C is a synthetic wax used as a lubricant in the formula. It is highly stable under heat and is practically inert physiologically. It has been approved by the Food and Drug Administration for incorporation in films used for food packaging; therefore, its toxicity to humans has been clearly established as entirely safe.

We trust this is the information you requested.

Very truly yours,

ASSISTANT MEDICAL DIRECTOR
INDUSTRIAL MEDICAL AND TOXICOLOGY DEPARTMENT

G. O. Nelson, M. D.
mt

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Dr. T. W. Nale

PAUL RUTHERFORD, PRESIDENT



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P. J. RIZZO

Hartford Accident and Indemnity Company

HOME OFFICE—HARTFORD 15 CONNECTICUT

24 WASHINGTON STREET, NEW BRITAIN, CONN.

April 28, 1953.

Mr. Peter Rizzo ⁴¹⁶⁵
Bakelite Corporation
42nd Street,
New York, New York

Dear Sir:

Re: 72 C 18274 - Stanley Bastek vs. Jessal
Plastics, Inc.

We have received a claim for workman's compensation for injuries sustained while in the employ of one of our assureds. We have been informed by the assured that the material with which the claimant was working was Bakelite 19406 Vinyl-Compound. The claimant alleges the fumes made him ill. At the time of his injury he became faint, and in fact, became unconscious for a short period of time. In the ensuing week he lost his speech and the use of his right hand. The neurologist who examined the claimant states that if the material with which he was working was a neurotoxin then, in his opinion, the injury is compensable.

We understand from our assured, Jessal Plastic, Inc. of Kensington, Connecticut, that you have conducted some research on this matter and we would appreciate any information you have which would enable us to arrive at the proper conclusion.

Very truly yours,

Hartford, Accident & Indemnity Co.

Philip C. Boyd
Philip C. Boyd

PCB:bef

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INDUSTRIAL MEDICAL &
TOXICOLOGY DEPARTMENT

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DOP Plasticizer, tire stabilized comp.

Vinylite ^{But} DOP D22 stabilizer (No evidence of neurotoxicity)
Acrowax ^{wax} C - just wax. ~~stabilizer~~?

Have extruded this ^{employees} - don't like fumes - probably D22
2 Chronic trouble makers, have gotten rid of them. This is one
inadequate ventilation is known by our Mr. Rizzo
Dick Bruce - Hartford Bakelite office.

DOP Diethyl hexyl sebacate

Dr. Clark - Bound Brook

Dr. Jellins

VXNW 67.28%

DOP 30.22%

D22 2.0%

Acrowax C 0.50 ← ^{Brooklyn} Glycer Prods. Sales Manager

copies to: Rizzo

Dick Bruce

J. Benedito

D. Munns N.Y.

high mol Stearamide Maine 4-1760

mint type wax

Lehman: approve Acrowax
as lubricant for food wrapping