

Mr. L. G. Howard
Bakelite Company
2330 Victory Parkway
Cincinnati 6, Ohio

September 12, 1958

Mr. T. R. Orme
Mr. M. Kovach
Mr. J. W. McLaughlin
Mr. G. T. Scriba
Dr. W. B. Ackart

KDA-2458 Blue 35

CONFIDENTIAL

Dear Mr. Howard:

I have been able to secure the entire formulation of this product. As to how far you can go in revealing this information to your customer is a question for sales to decide. It has been our experience in dealing with state agencies, such as the Kentucky State Department of Health, that often one can hand such a formulation to them in a confidential nature and they will treat it as such. The state agency will then know what KDA-2458 Blue 35 contains when a manufacturer like Chasco Pools applies for sanction for the use of their pool liner.

Another method would be to supply this formulation to the National Sanitation Foundation at the School of Public Health, University of Michigan, Ann Arbor, Michigan. This is the group which issued the report on "A Study of Plastic Pipe for Potable Water Supplies" in 1956. I would not be much surprised if formulations very much like KDA-2458 Blue 35 were evaluated in their studies although complete formulations are not revealed. If this group would consider this film to be safe for use in swimming pools then good evidence is available for its safety with any state agency.

According to the information available to us on the composition of this film, it contains around 50 per cent of a vinyl resin, such as is accepted as a food packaging material, and around 33 per cent of a plasticizer which is acceptable in food packaging formulations. It does not contain a lead stabilizer but contains calcium carbonate, a common constituent

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September 12, 1958

in water, and a minor amount of an organic tin stabilizer. The colorants used have been utilized in paints for years with safety.

It is our impression that KDA-2458 Blue 35 has a very low order of toxicity, and in its proposed application and use as a pool liner it would be considered as safe for this purpose.

We have a copy of the formulation supplied to us. If Mr. McLaughlin voices no objection, we can supply the same to you.

Very truly yours,

MEDICAL DIRECTOR

Thomas W. Hale, M. D.
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FOR INTERNAL CORRESPONDENCE

BAKELITE COMPANY

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2330 VICTORY PARKWAY, CINCINNATI 6, OHIO

To (Name) Dr. T. W. Nale
Company Bakelite Co.
Location 60 E. 42nd St., Room 920
New York, N. Y.

Date September 2, 1958

Originating Dept. Cincinnati DSO

Answering letter date

Copy to T. R. Orme, Chicago
M. Kovach, Chicago
J. W. McLaughlin, New York

Subject Toxicity of KDA 2458 Blue 35 -
Swimming Pool Liner Sheeting

Dear Dr. Nale:

On Wednesday, August 27, a meeting was held in the offices of Dr. Russel E. Teague, Commissioner of Health for the State of Kentucky, in which representatives of pool fabricators, Chafco Pools and suppliers of plastic pool liner sheeting were present. The meeting was called by Mr. Manny Frockt, Attorney for Chafco Pools, to solicit official approval for vinyl liners as a replacement for paint in public pools.

As expected, the toxicity angle was discussed and it was stated by the Health Department that they would give their approval if the vinyl liner was given the green light by the National Sanitation Foundation. Mr. Manny Frockt intended to write to NSF in Ann Arbor, Michigan, and I took the liberty of supplying your name as the proper person to contact in our company for toxicity information.

This was a very interesting meeting in that a public official went on record, in simple language, and everyone came away with the feeling that NSF would give their approval, and that Kentucky would become the first state to officially approve the use of a vinyl liner in swimming pools.

Since other suppliers are involved, I would like to urge that all available information be given to NSF so that our KDA 2458 will be included when approval is given.

I'm sure that you can supply all the information from our files, however, the attached brief write-up, which is strictly a sales tool, is attached for your perusal.

Very truly yours,

J. G. Howard
J. G. Howard

LGH:mls
Encl.

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INDUSTRIAL AND CIVIL
TOXICOLOGY DEPARTMENT

FACTS ABOUT KDA-2458 BLUE 35

KDA-2458 is an opaque, flexible vinyl sheeting designed primarily for use in outdoor swimming pool liners as it has unusual light stability and weathering characteristics. It can be easily cleaned and exhibits good resistance to dirt, acids, alkalies and the effects of water. Also, this compound possesses a high degree of flexibility over a wide range of temperature.

Approximately 96% of the composition is based on Food and Drug approved ingredients. The remaining 4% consists of stabilizer and pigments. This would be equivalent to any good paint normally used in pools since approximately 2% is Phthalocyanine Blue pigment and the rest is normally a lead stabilizer. The stabilizer used (not a lead product) is KDA 2458 is the same as used in our KDA-2940 composition which is specified in the Government specification MIL-D-5850C (ASG) Distillation Kits, Sea, Water, Solar. The application is a solar still.

Thus it is seen that only the pigment which is an inert substance could be a source of toxicity. Since it is also being used in paints with no harmful effects, it is expected to behave similarly in the plastic component.

Records in New York, New Jersey and California show that the useful life of a Pool Liner, made from KDA-2458, is $4\frac{1}{2}$ to 5 years. Also there has not been a single case of skin disorders or irritations associated with the use of these liners.