

70-220

2 C.C. TO
D. I. S.

October 27, 1969

William C. Roscell, M. D.
Monanto Chemical Company
P. O. Box 1501
Springfield, Mass. 01101

Dear Dr. Roscell:

The following observations were made by Dr. Brugsch and myself on our visit to your vinyl plastic mixing and calendaring operations on October 8. Information was provided by Mr. David Fraser, Mr. Paul Bureau and Mr. John Maximilian (chief steward). As explained to us, the operations are, basically, mixing and milling of polyvinyl chloride resin, to which relatively small amounts of pigments, such as titanium dioxide and calcium carbonate are added; for coloring purposes, other pigments may be used in small amounts.

In addition, plasticizing agents are added; the ones chiefly used are dioctyl phthalate, pumplex G-62, an epoxide of soybean oil, and Santicizer 409, whose chemical composition is not known.

The mixing operations, as observed, did not appear to give off large amounts of dust. During the milling, however, which is done at elevated temperatures, there appears to be some evidence of evolution of significant amounts of plasticizer. Local exhaust ventilation is provided for the mixers and mills.

According to the physical data, supplied by Mr. Bureau, the most volatile of the three plasticizers, is the DOP. Studies have been made which indicate that this is not a highly toxic material. However, inhalation of the fume can be irritating, and very high concentrations were fatal to animals.

These fumes are extremely disagreeable at times, according to some of the workers, and sometimes cause the men to become "nauseous."

One of the employees in this department Mr. Joseph Beauchemin a calendar is under a doctor's care suffering from a lung condition; however, the exact diagnosis appears to be in some doubt.

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RSV 0020611

70-129

2 C.C. TO
D. I. S.

October 27, 1969

William W. Nessel, II, D.
Monsanto Chemical Company
P. O. Box 1591
Springfield, Mass. 01101

Dear Dr. Nessel:

The following observations were made by Dr. Bragech and myself on our visit to your vinyl plastic mixing and calendering operations on October 8. Information was provided by Mr. David Fraser, Mr. Paul Bureau and Mr. John Wenderlein (also Stuart). As explained to us, the operations are, basically, mixing and milling of polyvinyl chloride resin, to which relatively small amounts of pigments, such as titanium dioxide and calcium carbonate are added; for coloring purposes, other pigments may be used in small amounts.

In addition, plasticizing agents are added; the ones chiefly used are dioctyl phthalate, exemplar G-62, an epoxide of soybean oil, and Santiclar 409, whose chemical composition is not known.

The mixing operations, as observed, did not appear to give off large amounts of dust. During the milling, however, which is done at elevated temperatures, there appears to be some evidence of evolution of significant amounts of plasticizer. Local exhaust ventilation is provided for the mixers and mills.

According to the physical data, supplied by Mr. Bureau, the most volatile of the three plasticizers, is the DOP. Studies have been made which indicate that this is not a highly toxic material. However, inhalation of the fume can be irritating, and very high concentrations were fatal to animals.

These fumes are extremely disagreeable at times, according to some of the workers, and sometimes cause the men to become "nauseous."

One of the employees in this department Mr. Joseph Boncherin a calender is under a doctor's care suffering from a lung condition; however, the exact diagnosis appears to be in some doubt.

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RSV 0020612