Cleveland Research Admin.

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Hazardous Heavy Metal Pigments

The American National Standards Institute (Z66.1) has specified a maximum limit since 1955 of 1% lead in paint intended for use on children's toys, furniture, or interior surfaces. A 1% level was also adopted by Congress in the Lead-Based Paint Poisoning Prevention Act.

A number of cities and states have been banning interior paints with greater than 1% lead based on NVM. The Commonwealth of Massachusetts has passed a law which will ban the selling and application of all lead-based paints (over ½% lead based on NVM of dried film) to any toy, furniture, or interior or exterior residential surface or fixture.

FDA has proposed hazardous labeling requirements if the paint or other surface coating material contains more than 0.8% lead, or a total of more than 0.05% antimony, arsenic, cadmium, mercury, or selenium; or soluble barium in excess of 1% of the total barium present.

Representative Ryan, et al, have proposed to FDA a ban of paints containing more than minute traces of lead (.06%). It now appears that FDA will require less than .06% lead. Chicago is considering an ordinance banning lead based paints on interior and exterior areas accessible to children. Almost immediate labeling of items of above 0.5% lead will be required. Effective January 1, 1973, permissible percentage of lead would drop to 0.03%. Other heavy metals requirements are similar to the FDA proposal. Senator Kennedy is proposing a 0.06% maximum level for lead.

It is very likely that sometime in the very near future the lead level requirement will be near zero. This means that we should eliminate all uses of lead pigments, lead driers or other lead containing materials in any formulations intended for use on any type of residential building, and in any product where ultimate use will be in or on a residential building. At a very minimum we will need to have all Trade Goods and residential type painter products at a near zero lead level. Near zero means that no lead materials should be used in the formula. Temporarily there will be minor amounts of lead in most alkyds because of the use of lead catalyst.

Our deadline for all residential type products, interior or exterior, is July 1, 1972.

For the time being, exterior yellows based on titanium-yellow, which contains antimony, will be handled by a hazardous label warning.

All trade-painter residential type formulations under your control should be reviewed to ensure that they meet these guidelines for lead and do not contain any of the other heavy metals referred to above. The TLJ40 report is a relatively good source for pin-pointing those items where lead and other toxic heavy metals have been used. Attached is a list of Rx indices where lead chromates, lead molybdates, titanium yellow (antimony), cadmium pigments and red leads were used in fiscal 1970-71. Additional sources of lead requiring attention are lead driers, litharge, and Naset Paste. Many items in the A2, A8, A11, A14, A15, A25, A33, A34, A38, A38, A45, M16, M42, M48 and M55 indices must be revised to eliminate these heavy metals. If you have any doubts on what should or should not be formulated, please consult me.

As a general rule, we should make sure that a formulation is near zero for lead and other heavy metals, etc. before approving sales copy that indicates the product is suitable for children's rooms, furniture, toys, etc. Please review this matter with your personnel responsible in this area and report any problem in meeting these guidelines.

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To - Laboratory Directors

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