WGK 100 **MONSANTO CHEMICAL COMPANY**
W. G. KRUMMRICH PLANT LABORATORY

STANDARD ANALYTICAL METHOD

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ATTACHMENTS: WGK Method 11,784		

PRODUCT: Aroclors, Pyranols, Inerteens and Electrical Grade Chlorobenzenes

TEST: Refractive Index

THIS FORM ☐ SUPERSEDES METHOD _____ ISSUED ON 2/26/53
☒ REVISES INSTRUCTIONS

SCOPE

This method is used to determine the refractive index of chlorinated benzenes and biphenyls by Abbe Refractometer.

EQUIPMENT

a. Refer to General Method No. 28, WGK Method No. 11,784, for necessary apparatus.

SAFETY

Chlorinated benzenes and biphenyls are irritating to the skin. The vapors of the hot materials are irritating to the eyes and upper respiratory system. If accidental contact is made with the eyes, flush immediately with large quantities of water and get immediate medical attention.

DETERMINATION

1. Determine the refractive index of the material as outlined in General Method No. 28, WGK Method No. 11,784, with the following modifications:

   a. Take the refractive index at 25°C.

   b. Clean the Abbe prisms by flushing with trichlorobenzene, followed with benzene, and finally with acetone.

NOTE: Do not touch the polished surfaces of the Abbe prisms!

CALCULATION

N_D^{25} = uncorrected reading ± correction

Report the results to the nearest 0.0001 units.

Duplicate results should agree within ± 0.0002.

PRECISION

Based on 20 replicate determinations by different analysts using different apparatus, the standard deviation of this method has been determined as ± 0.0002 units.

REFERENCE

Laboratory Notebook 159, 10, 12, 13, 21, 22, 32, 35.

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