SPECIALTY PRODUCTS

AROCLOR 1016

UV FLUORESCENCE OF DISTILLATION FRACTIONS. (4/2, Munch/Dietrich)

The intensity of the "blue" fluorescent band excited at 336 nm and emitting at 352 nm increases in the higher boiling fraction of Aroclor 1016 and is not removed by the absorber. The intensity of the "pink" fluorescent band is negligible in all the distillation fractions. (Katlafsky)

BIOACCUMULATION

TISSUE BUILD-UP AND WASH-OUT OF THE FOLLOWING PRODUCTS IN RATS VIA SUB-ACUTE ORAL INGESTION: MCBP, MCS 1043, AROCLOR 1016, AROCLOR 1242, MCS 1238, MCS 1475, MCS 1489, MCS 1302, MCS 1633, MCS 1623. (4/30, Munch/Mieure)

Report in final stages of preparation. (Kaley, Hicks)

BIODEGRADATION TESTING

ALKYLNAPHTHALENES. (5/31, Herber/Mieure)

Sampling of the SCAS units at the 3.3 ppm (5 mg) per 24-hour cycle addition rate has been started. Data are not yet available. (Renaudette, Saeger, Kaley)

BENZYL PSEUDO CUMENE. (5/31, Herber/Mieure)

The failure to observe the expected rapid degradation in the initial benzyl pseudo cumene fed SCAS unit prompted the start up of an additional unit with new sludge. Limited data from the new unit indicates rapid disappearance (>98% disappearance rate) of the test material. New sludge has now been added to the first unit to determine its effect on the disappearance rate. (Renaudette, Saeger, Kaley)

CHLORINATED DIPHENYLMETHANE ULTIMATE BIODEGRADABILITY. (5/15, Thompson/Mieure)

Ultimate biodegradation testing using the Thompson-Duthie CO_2 evolution procedure are in progress on MCS 1412 (o-chlorodiphenyl methane), MCS 1413 (p-chlorodiphenylmethane), and 2,4-dichlorodiphenylmethane. These mono- and dichlorodiphenylmethanes had previously been shown to undergo rapid primary degradation. After 19 days, CO_2 evolution is in the 70-80% range for all three materials. These data indicate essentially complete degradation with no persistent intermediates. (Renaudette, Saeger)

MCS 1558 AND MCS 1756. (6/30, Thompson/Mieure)

Initial SCAS disappearance rate data for MCS 1558 indicate very rapid primary biodegradation, while the by-product component, MCS 1756, appears to be very resistant to degradation. Ultimate biodegradation testing using the Thompson-Duthie carbon dioxide evolution procedure is in progress. After 19 days, CO_2 evolution amounting to 26% of theory has been obtained for MCS 1558, while no significant evolution has been observed for MCS 1756. The data for MCS 1558 seem to indicate that the metabolic pathway involves a more degradation resistant intermediate, probably trichlorophenylacetic acid. (Renaudette, Saeger, Kaley)

MCS 1732. (4/30, Thompson/Mieure)

After 18 weeks of testing at the 3.3 ppm (5 mg) level, this aryl sulfone continues to show resistance to degradation (mean disappearance rate = 17%). (Renaudette, Saeger, Kaley)