

US EPA ARCHIVE DOCUMENT

Data Validation Sheet

Formulation: Technical -

52.0% Cuprous oxide, 9.9% tributyltin methacrylate (as polymer). The solvent used was dimethyl formamide (DMF) and 38.1 % inerts.

Chemical Name: See above formulation. (Also known as Polyflo 2018).

Validator: Alvaro A. Yamhure

Date of Validation: 10/1/81

Test Type: Aquatic Invertebrate 48 hours LC50.

Test I.D.: Test conducted by EG & G, Biomonics and presented to M & T chemicals, Inc. of N.J. Report #BS-81-7-941.

Citation: Suprenant, Donald C., July, 1981. Acute Toxicity of bioMet 304/CuO (2018) paint to the Water Flea (Daphnia magna magna).

Validation Category: Acceptable (or core under present EEB rating system).

Results:

<u>Time (hours)</u>	<u>Test Species</u>	<u>Test Results (ppm)</u>	<u>95% Confidence Limits (ppm)</u>
24	<u>D. magna</u>	0.084	0.072 - 0.099
24	" "	0.084	0.0072 - 0.099
48	" "	0.058	0.040 - 0.085

The 48-h non-discernible effects level was <0.030 ppm.

Note: See attached copy of EPA's computer data validation sheet. EPA's results (0.0609 ppm) were slightly higher than the applicants.

Acute Toxicity of M & T Chemicals Inc. Polyflo 2018
to the Water flea (Daphnia). (Report No. BW-81-7-941.)

CONC.	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB. (PERCENT)
0.12	15	15	100	0.003051758
0.085	15	15	100	0.003051758
0.06	15	7	46.66667	50
0.04	15	0	0	0.003051758
0.03	15	0	0	0.003051758

THE BINOMIAL TEST SHOWS THAT 0.04 AND 0.085 CAN BE USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT CONFIDENCE LIMITS, BECAUSE THE ACTUAL CONFIDENCE LEVEL ASSOCIATED WITH THESE LIMITS IS GREATER THAN 95 PERCENT.

AN APPROXIMATE LC50 FOR THIS SET OF DATA IS 0.06095597

WHEN THERE ARE LESS THAN TWO CONCENTRATIONS AT WHICH THE PERCENT DEAD IS BETWEEN 0 AND 100, NEITHER THE MOVING AVERAGE NOR THE PROBIT METHOD CAN GIVE ANY STATISTICALLY SOUND RESULTS.
