

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: 10/4/81

Test Type: 96-hour LC50 for cold, fresh water fish.

Test I.D.: Test conducted by EG & G Bionomics and presented to M & T Chemicals, Inc. of N.J. Report # BW-81-7-953.

Citation: Sousa, Joseph V. July, 1981. Acute Toxicity of bioMet 304/CuO (2018) paint to Rainbow trout (Salmo gairdneri).

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>
48	Rainbow trout	-	0.075 - 0.10
72	" "	0.080	0.074 - 0.088
96	" "	0.056	0.048 - 0.066

96-h. non-discernible effects level <0.018 ppm

Note: See attached copy of EPA's computer data validation sheet. EPA's results were within the same C.L. than the applicant's (0.0599 ppm).

Acute Toxicity of M & T Chemicals Inc. Polyflo 2018
to the Rainbow trout. (Report No. BN-81-7-953)

CONC.	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB. (PERCENT)
0.1	10	10	100	0.09765625
0.075	10	10	100	0.09765625
0.056	10	3	30	17.1875
0.046	10	1	10	1.074219
0.032	10	0	0	0.09765625
0.024	10	0	0	0.09765625
0.018	10	0	0	0.09765625

THE BINOMIAL TEST SHOWS THAT 0.046 AND 0.075 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 0.05986185

RESULTS CALCULATED USING THE MOVING AVERAGE METHOD

SPAN	G	LC50	95 PERCENT CONFIDENCE LIMITS
4		0.1129726	0.05752007 0.05041979 0.06602958

NO CONVERGENCE IN 25 ITERATIONS. THE PROBIT METHOD PROBABLY CANNOT BE USED WITH THIS SET OF DATA.
