

ACTIVATED SLUDGE RESPIRATION INHIBITION

TEST SUBSTANCE

Identity: Perfluorooctanesulfonylamido(ethyl)acetate; may also be referred to as PFOSAA, FC-128 or as the major component of FC-127, FC-129, FC-109, FC-109-X, FC-4351, or L-6778. (Glycine, N-ethyl-N-[(heptadecafluorooctyl)sulfonyl]-, potassium salt, CAS # 2991-51-7)

Remarks: The 3M production lot number was 501 (F6873). The test sample is L-6778. Current information indicates it is a mixture of 40% water, 34.4% PFOSAA, 5.6% C₄-C₇ fluoroalkyl carboxylate compounds, 17% isopropyl alcohol, and 3% ethanol.

The following summary applies to a mixture with incompletely characterized concentrations of impurities. Data may not accurately reflect toxicity of the fluorochemical component of the test sample.

METHOD:

Methods: Protocol Reference EAR, 3/17/82.

Test type: Acute toxicity

GLP: No

Year Completed: 1982

Test organism source: Activated Sludge mixed liquor from St. Paul, Minnesota Metro Wastewater Treatment Plant

RESULTS

Nominal concentrations: Bk control, 1000 mg/L

Element values: No acute inhibitory effect on activated sludge respiration rate at 1000 mg/L with a contact time of 6 minutes, 20 seconds.

CONCLUSIONS

Limited contact time estimates that L-6778 is not expected to inhibit the activity of activated sludge.

Submitter: 3M Company, Environmental Laboratory, P.O. Box 33331, St. Paul, Minnesota, 55133

DATA QUALITY

Reliability: Klimisch ranking 3. Testing lacks record of methodology used. The method was not an agency approved method. The sample purity was not properly characterized and the study lacks analytical confirmation of the amount of fluorochemical proportion in the solution.

REFERENCES

This study was conducted by the 3M Company, Environmental Laboratory, St. Paul, MN, 3M Lab Request number 8442-1, 1982.

OTHER

Last changed: 3/31/01