

## SOLUBILITY IN PURE WATER, METHANOL, AND ACETONE – SHAKE FLASK METHOD

### TEST SUBSTANCE

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**Identity:** Perfluorooctanoic acid, ammonium salt; may also be referred to as PFOA, PFOA ammonium salt, Ammonium perfluorooctanoate, FC-116, FC-126, FC-169, or FC-143. (Octanoic acid, pentadecafluoro-, ammonium salt, CAS # 3825-26-1)

**Remarks:** Sample is a white powder. The 3M production lot number was 332. The 3M Test, Control, Reference number is TCR-99131-037. It's purity was characterized, and an Interim Certificate of Analysis issued indicating it contains 95.2% test substance.

### METHOD

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**Method:** Based on OECD 105, OPPTS 830.7840.

**GLP (Y/N):** Yes

**Year completed:** 2001

**Solvent Sources:**

**Pure water** = ASTM Type I water, Millipore

**Methanol** = B & J Brand, HPLC Grade

**Acetone** = EM Science, HPLC Grade

**Remarks:** The screening test consisted of placing approximately 10 mg PFOA into a glass vial, and adding 0.1 mL of the appropriate solvent. The vial was shaken, sonicated, and observed for particulates.

### RESULTS

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**ASTM Type I Water:** >10% (w/v) at 23°C

**Methanol:** >10% (w/v) at 23°C

**Acetone:** >10% (w/v) at 23°C

**Description of solubility:** Highly soluble.

**Remarks:** Per the test method, once solubility was established as >10%, no further testing was required. Definitive studies were therefore not conducted.

#### CONCLUSIONS

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The solubility concentration of the test substance in pure water, methanol, and acetone was >10% (w/v) for each respectively.

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

#### DATA QUALITY

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**Reliability:** Klimisch ranking 1.

#### REFERENCES

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Studies conducted at the 3M Company, St Paul, MN, 2001, Environmental Laboratory Project Number EOO-1762.

#### OTHER

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**Last changed:** 6/012/01