Service
Solutions

DOW CORNING

TOXICOLOGY, ENVIRONMENTAL AND CHEMISTRY TESTING AND CONSULTING

Environmental Testing and Consulting Services

Dow Corning has a history of performing quality research on difficult-to-test chemicals, with emphasis on silicon-based materials. This expertise includes studies that follow internationally recognized testing guidelines, as well as specially developed experimental designs and procedures to assess the environmental fate and effects of difficult-to-test materials.

Effects Testing

We are equipped to perform routine acute ecotoxicological effects studies (static, static-renewal and flow-through) as well as more specialized investigations, including chronic and early-life stage exposures, bioconcentration and whole-body autoradiography. Nontraditional routes of test material administration include: water-accommodated fractions (WAF), oil-water dispersions (OWD) and closed-system exposures with little or no headspace.

Aquatic
Fish Invertebrates
Plants (*Lemna* and algae)

Sediment
Invertebrates

Soil
Invertebrates
Plants

AV06233

Fate Testing

- Degradation
  - Biodegradation (aerobic and anaerobic)
  - Natural degradation (soil, water, sediment, air)
- Activated sludge respiration
- Chemical partitioning (adsorption)
  - Sludge
  - Soil
  - Sediment
- Transport and distribution (computer modeling)
- Field monitoring

Consulting

- Interpretation of fate and effects testing results
  - Physical/chemical properties (water, sediment, soil, air)
  - Degradation (water, sediment, soil, air)
  - Water column species (fish, invertebrates, algae)
  - Sediment dwelling organisms
  - Acute and chronic studies
- Environmental risk assessment
- Issue management
  - HPV (high production volume) chemicals
  - PBT (persistent, bioaccumulative, toxic) chemicals
  - POP (persistent, organic pollutants)
  - REACH (Registration, Evaluation and Authorization of Chemicals)

Modeling

Modeling is a key tool for developing and pre-screening new molecules to predict toxicity, fate, transport and distribution of a chemical structure in the environment before producing the material. We can perform several types of modeling:

- Regulatory
- QSAR (qualitative structural analysis regression)
- Fugacity (distribution in the environment)
- Risk assessment

Contact:

Randy Ransom

Environmental Sciences

+1 989-496-8814

randall.ransom@dowcorning.com or

Americas: *services.amer@dowcorning.com*

Or to obtain more information, please visit our website at *www.dowcorning.com/ehs*.

DOW CORNING

We help you invent the future.™

www.dowcorning.com

Form No. 90-1011A-01