

REACH Testing

Smithers offers a comprehensive range of tests that are required under Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH), from base set requirements for new chemicals to complex testing strategies to investigate whether a chemical is potentially persistent (P), bioaccumulative (B), mobile (M), toxic (T), or a potential endocrine disruptor (ED) for the environment.

With laboratories in the United Kingdom and United States, our teams are equipped with the scientific expertise, instrumentation, and regulatory knowledge to develop integrated testing strategies to assess, in a cost-efficient manner, whether a chemical is a potential PBT, vPvB, ED, PMT, or vPvM.

Smithers is the ideal partner to provide the studies needed to support your environmental hazard and risk assessment under REACH. Services include:

Physicochemical Testing

Testing for physicochemical and hazardous properties forms the central part of the data package for chemical registrations under REACH. Smithers performs physical chemistry testing according to internationally acceptable guidelines (OECD Guidelines, OPPTS) as well as testing for Classification, Labelling, and Packaging (CLP). Our scientists are experienced in working with unstable and highly reactive, poorly water soluble, sorptive, surface active, volatile substances, and substances with Unknown or Variable composition, Complex reaction products, or Biological materials (UVCB) substances.

Ecotoxicology

Smithers offers a variety of ecotoxicological programs with aquatic and terrestrial species. Areas of expertise include aquatic macrophytes and algal growth, fish and invertebrate acute studies, early life-stage, life cycle exposures in both aquatic and sediment environments, plant vegetative vigor, seedling emergence and germination, soil organisms (including earthworms), and pollinator studies.

Endocrine Disruptor Testing

Our scientists have performed endocrine disruptor studies as standalone designs or as combinations of the established test guidelines to meet specific ECHA requirements. Endocrine disruptor criteria are addressed by effects caused by estrogenic, androgenic, thyroidal, and steroidogenic (EATS) modalities. Smithers understands that each compound is unique, and endocrine disruptor testing is tailored to generate the endpoints relevant for the customized risk assessment.

Environmental Fate

Understanding the fate of a chemical, including its potential for persistence, bioaccumulation, and mobility, is a key part of the environmental risk assessment. Smithers offers the full range of environmental fate testing required under REACH, from biodegradation screening studies to complex higher-tiered simulation tests. Using radiolabeled test substances, our scientists have expertise in identification of degradation products to elucidate transformation pathways, and have extensive experience in investigating the non-extractable residue (NER) in soil, sediment and sewage sludge.

Learn more about our offerings at www.smithers.com, or contact us to discuss your testing needs.

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ENVIRONMENTAL
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