

# Analytical and Environmental Testing

## Physico-Chemical Testing



EPP has significant experience in performing the physico-chemical tests within the agrochemical, pharmaceutical, animal health and industrial chemical fields. We can perform (or subcontract\*) the following tests to help you get your product to market:

### OECD Guidelines

OECD 101	UV-VIS Absorption Spectra
OECD 102	Melting Point/Melting Range
OECD 103	Boiling Point
OECD 104	Vapour Pressure*
OECD 105	Water Solubility
OECD 106	Adsorption-Desorption Using a Batch Equilibrium Method*
OECD 107	Partition Coefficient (n-octanol/water): Shake Flask Method
OECD 109	Density of Liquids and Solids
OECD 111	Hydrolysis as a Function of pH
OECD 112	Dissociation Constants in Water
OECD 114	Viscosity of Liquids
OECD 117	Partition Coefficient (n-octanol/water): HPLC Method
OECD 121	Estimation of the Adsorption Coefficient ( $K_{oc}$ ) on Soil and on Sewage Sludge Using HPLC
OECD 123	Partition Coefficient (n-octanol/water): Slow Stirring Method

### OJEC Test Methods

A1	UV-VIS Absorption Spectra
A2	Melting Point/Melting Range
A3	Relative Density
A4	Vapour Pressure*
A6	Water Solubility
A8	Partition Coefficient (n-octanol/water): Shake Flask Method
A9	Flash-Point (Liquids)*
A10	Flammability (Solids)*

A11	Flammability (Gases)*
A12	Flammability (Contact with Water)*
A13	Pyrophoric Properties of Solids and Liquids*
A14	Explosive Properties*
A15	Auto-Ignition Temperature (Liquids and Gases)*
A16	Relative Self-Ignition Temperature for Solids*
A17	Oxidising Properties (Solids)*
A18	Number - Average Molecular Weight and Molecular Weight Distribution of Polymers*
A19	Low Molecular Weight Content of Polymers*
A20	Solution / Extraction Behaviour of Polymers in Water*
A21	Oxidising Properties (Liquids)*
C7	Degradation: Abiotic Degradation: Hydrolysis as a Function of pH
C18	Adsorption-Desorption Using a Batch Equilibrium Method*
C19	Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography

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## CIPAC Methods

MT 3.3	Specific Gravity / Density of Suspension Concentrate Formulation
MT 15.1	Wettable Powder
MT 20	Dilute Emulsion Stability
MT 23	Miscibility with Hydrocarbon Oil
MT 31	Free Acidity or Alkalinity
MT 33	Tap Density - Powder
MT 34	Dustability after storage
MT 36	Emulsion Characteristics of Emulsifiable Concentrates
MT 39	Stability of Liquid Formulations
MT 41	Solution Stability of all Aqueous Solutions
MT 44	Flowability Powders
MT 46	Accelerated Storage Procedure
MT 47	Persistent Foaming
MT 53	Wettability
MT 58	Dust Content
MT 58.4	Apparent Density
MT 59.1	Dustable Powders
MT 59.2	Sieve Analysis
MT 75	Determination of pH Values
MT 83	Adhesion to Seeds
MT 146	Oil content of Emulsifiable Concentrates
MT 147	Retention of Seed Treatment Powders
MT 148	Pourability of Suspension Concentrates
MT 159	Pour Density

MT 160	Spontaneity of Dispersion of Suspension Concentrates
MT 161	Suspension Concentrate
MT 167	Wet Sieve after Dispersion
MT 168	Water Dispersible Granule
MT 169	Tap Density - WG
MT 170	Dry Sieve Analysis of Water Dispersible Granules
MT 171	Dustiness
MT 172	Flowability of Granular Preparations after Heat Test Under Pressure
MT 173	Stability of Dilute Emulsion (colorimetric)
MT 174	Dispersibility of Water Dispersible Granules
MT 176	Dissolution Rate of Water Soluble Bags
MT 177	Water Dispersible Powder
MT 178	Attrition Resistance
MT 179	Degree of Dissolution and Solution Stability
MT 180	Dispersion Stability of Suspo-Emulsion
MT 182	Wet Sieve Recycled Water
MT 184	Suspensibility of Formulations Forming Suspensions on Dilution With Water
MT 185	Wet Sieve Test
MT 186	Bulk Density
MT 191	Acidity or Alkalinity of Formulations

Please contact [enquiries@eppltd.com](mailto:enquiries@eppltd.com)  
for further information

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## Contact the EPP expert

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## Environmental Safety Testing



EPP has significant experience in performing the environmental safety tests required to register chemicals within the agrochemical, pharmaceutical, animal health and industrial chemical fields. We can perform the following tests to help you get your product to market:

### Freshwater Aquatic Tests

OECD 201	Freshwater Alga and Cyanobacteria, Growth Inhibition Test
OECD 202	Daphnia sp. Acute Immobilisation Test
OECD 203	Fish, Acute Toxicity Test
OECD 209	Activated Sludge, Respiration Inhibition Test
OECD 210	Fish, Early Life Stage Toxicity Test
OECD 211	Daphnia magna Reproduction Test
OECD 212	Fish, Short Term Toxicity Test on Embryo and Sac-Fry Stages
OECD 215	Fish, Juvenile Growth Test
OECD 218	Sediment-Water Chironomid Toxicity Using Spiked Sediment
OECD 219	Sediment-Water Chironomid Toxicity Using Spiked Water
OECD 221	Lemna sp. Growth Inhibition Test
OECD 225	Sediment-Water Lumbriculus Toxicity Test Using Spiked Sediment
OECD 229	Fish Short Term Reproduction Assay
OECD 230	21-Day Fish Assay: A Short-Term Screening for Oestrogenic and Androgenic Activity and Aromatase Inhibition
OECD 233	Sediment-Water Chironomid Life-Cycle Toxicity Test Using Spiked Water or Spiked Sediment
OECD 234	Fish Sexual Development Test
OECD 235	Chironomus sp., Acute Immobilisation Test
OECD 236	Fish Embryo Acute Toxicity (FET) Test
OECD 238	Sediment-Free Myriophyllum spicatum Toxicity Test
OECD 239	Water-Sediment Myriophyllum spicatum Toxicity Test



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## Marine Aquatic Tests

OCSP 850.1035	Mysid Acute Toxicity Test
OCSP 850.1350	Daphnia sp. Acute Immobilisation Test
ASTM E1191	Life-Cycle Toxicity Tests with Saltwater Mysids
ASTM E1367	Toxicity of Sediment-Associated Contaminants with Estuarine and Marine Invertebrates
ASTM E1611	Sediment Toxicity Tests with Polychaetous Annelids
ASTM E2317	Renewal Microplate-Based Life-Cycle Toxicity Tests with a Marine Meiobenthic Copepod
ISO 10253	Marine Algal Growth Inhibition Test
ISO 14669	Determination of Acute Lethal Toxicity to Marine Copepods
PARCOM Part A	Sediment Bioassay using <i>Corophium</i> sp.
PARCOM Part B	Fish Acute Toxicity Test (Modified OECD 203)

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## Terrestrial Tests

OECD 122	Guidance Document on the Determination of the Toxicity of a Test Chemical to the Dung Beetle, <i>Aphodius Constans</i>
OECD 207	Earthworm, Acute Toxicity Tests
OECD 208	Terrestrial Plant Test: Seedling Emergence and Seedling Growth
OECD 213	Honeybees, Acute Oral Toxicity Test
OECD 214	Honeybees, Acute Contact Toxicity Test
OECD 216	Soil Microorganisms: Nitrogen Transformation Test
OECD 217	Soil Microorganisms: Carbon Transformation Test
OECD 222	Earthworm Reproduction Test
OECD 226	Predatory Mite ( <i>Hypoaspis aculeifer</i> ) Reproduction Test in Soil
OECD 227	Terrestrial Plant Test: Vegetative Vigour
OECD 228	Determination of Developmental Toxicity of a Test Chemical to Dipteran Dung Flies
OECD 232	Collembolan Reproduction Test in Soil
OECD 237	Honey Bee ( <i>Apis mellifera</i> ) Larval Toxicity Test, Single Exposure

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## Degradation and Accumulation Tests

OECD 301	Ready Biodegradability
OECD 305	Bioaccumulation in Fish: Aqueous and Dietary Exposure
OECD 307	Aerobic and Anaerobic Transformation in Soil
OECD 308	Aerobic and Anaerobic Transformation in Aquatic Sediment Systems
OECD 309	Aerobic Mineralisation in Surface Water – Simulation Biodegradation Test
OECD 315	Bioaccumulation in Sediment-dwelling Benthic Oligochaetes
OECD 316	Phototransformation of Chemicals in Water – Direct Photolysis
OECD 317	Bioaccumulation in Terrestrial Oligochaetes
ISO 11267	Inhibition of Reproduction of Collembola ( <i>Folsomia Candida</i> ) by Soil Pollutants
OECD Draft Guideline	Phototransformation of Chemicals on Soil Surfaces

Bespoke tests are also available on request

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## Data Compilation

EPP can also compile your data for you in IUCLID 6 format, ready for submission to regulatory authorities.

Please contact [enquiries@eppltd.com](mailto:enquiries@eppltd.com) for further information

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## Contact the EPP expert

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