

OECD GUIDELINES FOR TESTING OF CHEMICALS

Full List of Test Guidelines June 2019

SECTION 1 - PHYSICAL-CHEMICAL PROPERTIES

Summary of Considerations in the Report from the OECD Expert Group on Physical Chemistry

No.	Title	Original Adoption	No. of Updates	Updates	Most recent update
101	UV-VIS Absorption Spectra	12 May 1981	0		---
102	Melting Point/Melting Range	12 May 1981	1		27 July 1995
103	Boiling Point	12 May 1981	1		27 July 1995
104	Vapour Pressure	12 May 1981	2	27 July 1995	23 March 2006
105	Water Solubility	12 May 1981	1		27 July 1995
106	Adsorption/Desorption Using a Batch Equilibrium Method	12 May 1981	1		21 January 2000
107	Partition Coefficient (n-octanol/water): Shake Flask Method	12 May 1981	1		27 July 1995
108	Complex Formation Ability in Water	12 May 1981	0		---
109	Density of Liquids and Solids	12 May 1981	2	27 July 1995	2 October 2012
110	Particle Size Distribution/Fibre Length and Diameter Distributions	12 May 1981	0		---
111	Hydrolysis as a function of pH	12 May 1981	1		13 April 2004
112	Dissociation Constants in Water	12 May 1981	0		---
113	Screening Test for Thermal Stability and Stability in Air	12 May 1981	0		---
114	Viscosity of Liquids	12 May 1981	1		2 October 2012
115	Surface Tension of Aqueous Solutions	12 May 1981	1		27 July 1995

No.	Title	Original Adoption	No. of Updates	Updates	Most recent update
116	Fat Solubility of Solid and Liquid Substances	12 May 1981	0		---
117	Partition Coefficient (n-octanol/water), HPLC method	30 March 1989	1		13 April 2004
118	Determination of the Number-Average Molecular Weight and the Molecular Weight Distribution of Polymers using Gel Permeation Chromatography	14 June 1996	0		---
119	Determination of the Low Molecular Weight Content of a Polymer Using Gel Permeation Chromatography	14 June 1996	0		---
120	Solution/Extraction Behaviours of Polymers in Water	14 June 1996	1		21 January 2000
121	Estimation of the Adsorption Coefficient (K_{oc}) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC)	22 January 2001	0		---
122	Determination of pH, Acidity and Alkalinity	26 July 2013	0		----
123	Partition Coefficient (1-Octanol / Water): Slow-Stirring Method	23 March 2006	0		---

SECTION 2 - EFFECTS ON BIOTIC SYSTEMS

Summary of Considerations in the Report from the OECD Expert Group on Ecotoxicology

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
201	Freshwater Alga and Cyanobacteria, Growth Inhibition Test	12 May 1981	2	7 June 1984	23 March 2006 (corrected on 28 July 2011)
202	<i>Daphnia</i> sp. Acute Immobilisation Test	12 May 1981 (adopted as <i>Daphnia</i> sp.14-day Reproduction Test including an Acute Immobilisation Test)	2	4 April 1984	13 April 2004
203	Fish, Acute Toxicity Test	12 May 1981	3	4 April 1984 17 July 1992	14 June 2019
204	Fish, Prolonged Toxicity Test: 14-Day Study	4 April 1984	0		Date of deletion 2 April 2014
205	Avian Dietary Toxicity Test	4 April 1984	0		---
206	Avian Reproduction Test	4 April 1984	0		---
207	Earthworm, Acute Toxicity Tests	4 April 1984	0		---
208	Terrestrial Plants, Growth Test	4 April 1984	1		19 July 2006
209	Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)	4 April 1984	1		22 July 2010
210	Fish, Early-Life Stage Toxicity Test	17 July 1992	1		26 July 2013
211	<i>Daphnia magna</i> Reproduction Test	21 September 1998	2	3 October 2008	2 October 2012
212	Fish, Short- term Toxicity Test on Embryo and Sac-fry Stages	21 September 1998	0		---

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
213	Honeybees, Acute Oral Toxicity Test	21 September 1998	0		---
No.	Title	Original Adoption	No. of updates	Updates	Most recent update
214	Honeybees, Acute Contact Toxicity Test	21 September 1998	0		---
215	Fish, Juvenile Growth Test	21 January 2000	0		---
216	Soil Microorganisms: Nitrogen Transformation Test	21 January 2000	0		---
217	Soil Microorganisms: Carbon Transformation Test	21 January 2000	0		---
218	Sediment-Water Chironomid Toxicity Using Spiked Sediment	13 April 2004	0		---
219	Sediment-Water Chironomid Toxicity Using Spiked Water	13 April 2004	0		---
220	Enchytraeid Reproduction Test	13 April 2004	1		26 July 2016
221	<i>Lemna</i> sp. Growth Inhibition Test	23 March 2006	0		---
222	Earthworm Reproduction Test (<i>Eisenia fetida</i> / <i>Eisenia andrei</i>)	13 April 2004	1		26 July 2016
223	Avian Acute Oral Toxicity Test	22 July 2010	1		26 July 2016
224	Determination of the activity of anaerobic bacteria – Reduction of gas production from anaerobically sewage sludge	8 January 2007	0		---

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
225	Sediment-Water <i>Lumbriculus</i> Toxicity Test Using Spiked Sediment	16 October 2007	0		---
226	Predatory Mite (<i>Hypoaspis</i> (<i>Geolaelaps</i>) <i>Aculeifer</i>) Reproduction Test in Soil	3 October 2008	1		26 July 2016
227	Terrestrial Plant Test: Vegetative Vigour Test	19 July 2006	0		---
228	Determination of Developmental Toxicity of a Test Chemical to Dipteran Dung Flies (<i>Scathophaga stercoraria</i> L. (<i>Scathophagidae</i>) and <i>Musca autumnalis</i> De Geer (<i>Muscidae</i>))	3 October 2008	1		26 July 2016
229	Fish Short Term Reproduction Assay	7 September 2009	1		2 October 2012
230	21-Day Fish Assay: A Short Term Screening Assay for Oestrogenic and Androgenic Activity, and Aromatase Inhibition	7 September 2009	0		---
231	Amphibian Metamorphosis Assay	7 September 2009	0		---
232	Collembolan Reproduction Test in Soil	7 September 2009	1		26 July 2016
233	Sediment-Water Chironomid Life-Cycle Toxicity Test Using Spiked Water or Spiked Sediment	22 July 2010	0		---
234	Fish Sexual Development Test	28 July 2011	0		---

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
235	<i>Chironomus</i> sp., Acute Immobilisation Test	28 July 2011	0		---
236	Fish Embryo Acute Toxicity (FET) Test	26 July 2013	0		---
237	Honey bee (<i>Apis mellifera</i>) Larval Toxicity Test, Single Exposure	26 July 2013	0		---
238	Sediment-free <i>Myriophyllum spicatum</i> Toxicity Test	26 September 2014	0		---
239	Water-Sediment <i>Myriophyllum spicatum</i> Toxicity Test	26 September 2014	0		---
240	Medaka Extended One-Generation Reproduction Test	28 July 2015	0		---
241	Larval Amphibian Growth and Development Assay	28 July 2015	0		---
242	<i>Potamopyrgus antipodarum</i> Reproduction Test	26 July 2016	0		---
243	<i>Lymnaea stagnalis</i> Reproduction Test	26 July 2016	0		---
244	Protozoa Activated Sludge Inhibition Test	9 October 2017	0		---
245	Honeybee, 10-day oral toxicity test	9 October 2017	0		---
246	Bumblebee, acute contact toxicity test	9 October 2017	0		---
247	Bumblebee, acute oral toxicity test	9 October 2017	0		---
248	Xenopus Eleutheroembryo Thyroid Assay	14 June 2019	0		---

SECTION 3 – DEGRADATION AND ACCUMULATION

Summary of Considerations in the Report from the OECD Expert Group on Degradation/Accumulation

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
301	Ready Biodegradability: 301A : DOC Die-Away Test 301B : CO ₂ Evolution Test 301C : Modified MITI Test (I) 301D : Closed Bottle Test 301E : Modified OECD Screening Test 301F : Manometric Respirometry Test	12 May 1981	1		17 July 1992 (301F corrected on 26 July 2013)
302A	Inherent Biodegradability: Modified SCAS Test	12 May 1981	0		---
302B	Inherent Biodegradability: Zahn-Wellens/EMPA Test	12 May 1981	1		17 July 1992
302C	Inherent Biodegradability: Modified MITI Test (II)	12 May 1981	0		(corrected in 2009)
303	Simulation Test – Aerobic Sewage Treatment: A: Activated Sludge Units; B: Biofilms	12 May 1981	1		22 January 2001
304A	Inherent Biodegradability in Soil	12 May 1981	0		---
305	Bioaccumulation in Fish: Aqueous and Dietary Exposure	12 May 1981	2	14 June 1996	2 October 2012
306	Biodegradability in Seawater	17 July 1992	0		---
307	Aerobic and Anaerobic Transformation in Soil	24 April 2002	0		---
308	Aerobic and Anaerobic Transformation in Aquatic Sediment Systems	24 April 2002	0		---
309	Aerobic Mineralisation in Surface Water – Simulation Biodegradation Test	13 April 2004	0		
310	Ready Biodegradability – CO ₂ in sealed vessels (Headspace Test)	23 March 2006	0		(corrected on 26 September 2014)
311	Anaerobic Biodegradability of Organic Compounds in Digested Sludge: by	23 March 2006	0		---

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
	Measurement of Gas Production				
312	Leaching in Soil Columns	13 April 2004	0		---
313	Estimation of Emissions from Preservative - Treated Wood to the Environment: Laboratory Method for Wooden Commodities that are not Covered and are in Contact with Fresh Water or Seawater	16 October 2007	0		---
314	Simulation Tests to Assess the Biodegradability of Chemicals Discharged in Wastewater	3 October 2008	0		---
315	Bioaccumulation in Sediment-dwelling Benthic Oligochaetes	3 October 2008	0		---
316	Phototransformation of Chemicals in Water- Direct Photolysis	3 October 2008	0		---
317	Bioaccumulation in Terrestrial Oligochaetes	22 July 2010	0		---
318	Dispersion Stability of Nanomaterials in Simulated Environmental Media	9 October 2017	0		---
319A	Determination of in vitro intrinsic clearance using cryopreserved rainbow trout hepatocytes (RT-HEP)	27 June 2018	0		---
319B	Determination of in vitro intrinsic clearance using rainbow trout liver S9 sub-cellular fraction (RT-S9)	27 June 2018	0		---

SECTION 4 – HEALTH EFFECTS

Summary of Considerations in the Report from the OECD Expert Groups on Short and Long Term Toxicology

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
401	Acute Oral Toxicity	12 May 1981	1	24 February 1987	Date of Deletion: 17 December 2001
402	Acute Dermal Toxicity	12 May 1981	2	24 February 1987	9 October 2017
403	Acute Inhalation Toxicity	12 May 1981	1		7 September 2009
404	Acute Dermal Irritation/ Corrosion	12 May 1981	3	17 July 1992 24 April 2002	28 July 2015
405	Acute Eye Irritation/ Corrosion	12 May 1981 (corrected in 2017)	3	24 April 2002 24 Feb. 1987	2 Oct. 2012
406	Skin Sensitisation	12 May 1981	1		17 July 1992
407	Repeated Dose 28-Day Oral Toxicity Study in Rodents	12 May 1981	2	27 July 1995	3 October 2008
408	Repeated Dose 90-Day Oral Toxicity Study in Rodents	12 May 1981	2	21 September 1998	25 June 2018
409	Repeated Dose 90-Day Oral Toxicity Study in Non- Rodents	12 May 1981	1		21 September 1998
410	Repeated Dose Dermal Toxicity:90-Day	12 May 1981	0		---
411	Subchronic Dermal Toxicity: 90-day Study	12 May 1981	0		---
412	Subacute Inhalation Toxicity: 28-Day Study	12 May 1981	2	7 September 2009	9 October 2017 (Corrected 27 June 2018)

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
413	Subchronic Inhalation Toxicity: 90-Day Study	12 May 1981	2	7 September 2009	9 October 2017 (Corrected 27 June 2018)
414	Prenatal Developmental Toxicity Study	12 May 1981	2	22 January 2001	27 June 2018
415	One-Generation Reproduction Toxicity Study	26 May 1983	0		Date of Deletion: 9 October 2017 (effective 9 April 2019)
416	Two-Generation Reproduction Toxicity Study	26 May 1983	1		22 January 2001
417	Toxicokinetics	4 April 1984	1		22 July 2010
418	Delayed Neurotoxicity of Organophosphorus Substances Following Acute Exposure	4 April 1984	1		27 July 1995
419	Delayed Neurotoxicity of Organophosphorus Substances: 29-Day Repeated Dose Study	4 April 1984	1		27 July 1995
420	Acute Oral toxicity – Fixed Dose Procedure	17 July 1992	1		17 December 2001
421	Reproduction/Developmental Toxicity Screening Test	27 July 1995	2	28 July 2015	26 July 2016
422	Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test	22 March 1996	2	28 July 2015	26 July 2016
423	Acute Oral Toxicity – Acute Toxic Class Method	22 March 1996	1		17 December 2001
424	Neurotoxicity Study in Rodents	21 July 1997	0		---
425	Acute Oral Toxicity: Up-and-Down Procedure	21 September 1998 (corrected in 2008)	2	17 December 2001	23 March 2006

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
426	Developmental Neurotoxicity Study	16 October 2007	0		---
427	Skin Absorption: <i>in vivo</i> Method	13 April 2004			---
428	Skin Absorption: <i>in vitro</i> Method	13 April 2004			---
429	Skin Sensitisation: Local Lymph Node Assay	24 April 2002	1		22 July 2010
430	<i>in vitro</i> Skin Corrosion: Transcutaneous Electrical Resistance Test (TER)	13 April 2004	2	26 July 2013	28 July 2015
431	<i>in vitro</i> Skin Corrosion: Reconstructed Human Epidermis (RHE) Test	13 April 2004	5	26 July 2013 26 Sept. 2014 28 July 2015 26 July 2016	14 June 2019
432	<i>in vitro</i> 3T3 NRU Phototoxicity Test	13 April 2004	1		14 June 2019
433	Acute Inhalation Toxicity test, Fixed Concentration Procedure	9 October 2017 (Corrected 27 June 2018)	0		---
435	<i>in vitro</i> Membrane Barrier Test Method for Skin Corrosion	19 July 2006	1		28 July 2015
436	Acute Inhalation Toxicity - Acute Toxic Class Method	7 September 2009	0		---
437	Bovine Corneal Opacity and Permeability Test Method for Identifying Ocular Corrosives and Severe Irritants	7 September 2009 (corrected in 2010) (corrected in 2017)	1		26 July 2013
438	Isolated Chicken Eye Test Method for Identifying Ocular Corrosives and Severe Irritants	7 September 2009 (corrected in 2017)	2	26 July 2013	27 June 2018

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
439	<i>in vitro</i> Skin Irritation: Reconstructed Human Epidermis Test Method	22 July 2010	3	26 July 2013 28 July 2015	14 June 2019
440	Uterotrophic Bioassay in Rodents: A short-term screening test for oestrogenic properties	16 October 2007	0		---
441	Hershberger Bioassay in Rats: A short-term Screening Assay for (Anti)Androgenic Properties	7 September 2009	0		---
442A	Skin Sensitization: Local Lymph Node Assay: DA	22 July 2010	0		---
442B	Skin Sensitization: Local Lymph Node Assay: BrdU-ELISA	22 July 2010	1		27 June 2018
442C	<i>In chemico</i> skin Sensitisation	5 February 2015	1		14 June 2019
442D	<i>In vitro</i> Skin Sensitisation	5 February 2015	1		27 June 2018
442E	<i>In vitro</i> Skin Sensitisation: In Vitro Skin Sensitisation assays addressing the Key Event on activation of dendritic cells on the Adverse Outcome Pathway for Skin Sensitisation	26 July 2016	1		9 October 2017 (Corrected 27 June 2018)
443	Extended One-Generation Reproductive Toxicity Study	28 July 2011 (corrected in 2012) (corrected in 2018)	0		
451	Carcinogenicity Studies	12 May 1981	1		7 September 2009 (corrected in 2018)
452	Chronic Toxicity Studies	12 May 1981	1		7 September 2009 (corrected in 2018)

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
453	Combined Chronic Toxicity/ Carcinogenicity Studies	12 May 1981	1		7 September 2009 (corrected in 2018)
455	Performance-based Test Guideline for Stably Transfected Transactivation <i>in vitro</i> Assays to Detect Estrogen Receptor Agonists and Antagonists	7 September 2009	3	2 October 2012 28 July 2015	26 July 2016
456	H295R Steroidogenesis Assay	28 July 2011 (corrected on 14 June 2019)	0		---
457	BG1Luc Estrogen Receptor Transactivation <i>in vitro</i> Assay to Detect Estrogen Receptor Agonists and Antagonists	2 October 2012	0		Date of deletion 29 January 2018
458	Stably Transfected Human Androgen Receptor Transcriptional Activation Assay for Detection of Androgenic Agonist and Antagonist Activity of Chemicals	26 July 2016	0		---
460	Fluorescein Leakage Test Method for Identifying Ocular Corrosives and Severe Irritants	2 October 2012 (corrected in 2017)	0		
471	Bacterial Reverse Mutation Test	26 May 1983	1		21 July 1997
472	Genetic Toxicology: <i>Escherichia coli</i> , Reverse Assay	26 May 1983	0		Date of deletion: 21 July 1997 (Method merged with TG 471)
473	<i>in vitro</i> Mammalian Chromosome Aberration Test	26 May 1983 (corrected in 2016)	2	21 July 1997	26 September 2014
474	<i>in vivo</i> Mammalian Erythrocyte Micronucleus Test	26 May 1983 (corrected in 2016)	2	21 July 1997	26 September 2014

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
475	<i>in vivo</i> Mammalian Bone Marrow Chromosome Aberration Test	4 April 1984 (corrected in 2016)	2	21 July 1997	26 September 2014
476	<i>in vitro</i> Mammalian Cell Gene Mutation Tests using the Hprt and xpvt genes	4 April 1984 (corrected in 2016)	2	21 July 1997	28 July 2015
477	Genetic Toxicology: Sex-Linked Recessive Lethal Test in <i>Drosophila melanogaster</i>	4 April 1984	0		Date of deletion 2 April 2014
478	Genetic Toxicology: Rodent Dominant Lethal Test	4 April 1984 (corrected in 2016)	1		28 July 2015
479	Genetic Toxicology: <i>in vitro</i> Sister Chromatid Exchange assay in Mammalian Cells	23 October 1986	0		Date of deletion 2 April 2014
480	Genetic Toxicology: <i>Saccharomyces cerevisiae</i> , Gene Mutation Assay	23 October 1986	0		Date of deletion 2 April 2014
481	Genetic Toxicology: <i>Saccharomyces cerevisiae</i> , Mitotic Recombination Assay	23 October 1986	0		Date of deletion 2 April 2014
482	Genetic Toxicology: DNA Damage and Repair, Unscheduled DNA Synthesis in Mammalian Cells <i>in vitro</i>	23 October 1986	0		Date of deletion 2 April 2014
483	Mammalian Spermatogonial Chromosomal Aberration Test	23 October 1986 (corrected in 2016)	2	21 July 1997	28 July 2015
484	Genetic Toxicology: Mouse Spot Test	23 October 1986	0		Date of deletion 2 April 2014
485	Genetic Toxicology: Mouse Heritable Translocation Assay	23 October 1986	0		---
486	Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells <i>in vivo</i>	21 July 1997	0		---
487	<i>in vitro</i> Mammalian Cell	22 July 2010	1		26 September 2014

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
	Micronucleus Test	(corrected in 2016)			
488	Transgenic Rodent Somatic and Germ Cell Gene Mutation Assays	28 July 2011 (corrected in 2016)	1		26 July 2013
489	<i>in vivo</i> Mammalian Alkaline Comet Assay	22 September 2014	0		---
490	<i>In vitro</i> Thymidine Kinase Mutation Test	28 July 2015 (corrected in 2016)	0		
491	Short-time Exposure for the Detection of Chemicals Causing Serious Eye Damage, and Chemicals Not Requiring Classification for Serious Eye Damage or Eye Irritation	28 July 2015 (corrected in 2017) (Corrected 27 June 2018)	0		---
492	Reconstructed Human Cornea-like Epithelium for the Detection of Chemicals Not Requiring Classification and Labelling for Eye Irritation or Serious Eye Damage	28 July 2015 (corrected in 2017)	2	27 June 2018	14 June 2019
493	Human Recombinant Estrogen Receptor Binding Assay	28 July 2015	0		---
494	Vitrigel-Eye Irritancy Test Method for Identifying Chemicals Not Requiring Classification and Labelling for Eye Irritation or Serious Eye Damage	14 June 2019	0		---
495	Ros (Reactive Oxygen Species) Assay For Photoreactivity	14 June 2019	0		---

SECTION 5 – OTHER TEST GUIDELINES

Introduction to OECD Test Guidelines on pesticide residues chemistry section 5 – Part a

Part A: Pesticide Residue Chemistry

No.	Title	Original Adoption	No. of Updates	Updates	Most Recently Updated
501	Metabolism in Crops	10 January 2007	0		---
502	Metabolism in Rotational Crops	10 January 2007	0		---
503	Metabolism in Livestock	10 January 2007	0		---
504	Residues in Rotational Crops (Limited Field Studies)	10 January 2007	0		---
505	Residues in Livestock	10 January 2007	0		---
506	Stability of Pesticide Residues in Stored Commodities	16 October 2007	0		---
507	Nature of the Pesticide Residues in Processed Commodities- High Temperature Hydrolysis	16 October 2007	0		---
508	Magnitude of Pesticide Residues in Processed Commodities	3 October 2008	0		---
509	Crop Field Trial	7 September 2009	0		---