

Alternative OECD Prüfmethoden (Test guidelines, TG) – Stand Sommer 2023

Endpunkt	Titel	OECD TG	veröffentlicht	überarbeitet	3R Relevanz
Akute Toxizität	Acute Oral Toxicity - Fixed Dose Procedure	420	1992	2001	Reduction
	Acute Oral toxicity - Acute Toxic Class Method	423	1996	2001	Reduction
	Acute Oral Toxicity: Up-and-Down Procedure	425	1998	2008/2022***	Reduction
	Acute Inhalation Toxicity - Acute Toxic Class Method	436	2009		Reduction
	Fixed Dose Procedure as alternative to TG 403	433	2017	2018***	Reduction Refinement
Augenreizung / schwere Augenschäden	Bovine Corneal Opacity and Permeability (BCOP) test method	437	2009	2013/2017/ 2020/2023***	Replacement
	Isolated chicken eye (ICE) test method	438	2009	2013/2017/ 2018/2023***	Replacement
	Fluorescein Leakage (FL) test method	460	2012	2017/2023***	Replacement
	Defined Approaches for Serious Eye Damage and Eye Irritation	467	2022		Replacement

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	Short Time Exposure test method (STE)	491	2015	2017/2020/2023***	Replacement
	Reconstructed human cornea-like epithelium test method (RhCE)	492	2015	2017/2018/2019/2023***	Replacement
	Reconstructed Human Cornea-like Epithelium (RHCE) Test Method for Eye Hazard Identification	492B	2022		Replacement
	Vitrigel-Eye Irritancy Test Method for Identifying Chemicals Not Requiring Classification and Labelling for Eye Irritation or Serious Eye Damage	494	2019	2021	Replacement
	In vitro Macromolecular Test Method for Identifying Chemicals Inducing Serious Eye Damage and Chemicals not Requiring Classification for Eye Irritation or Serious Eye Damage	496	2019	2023***	Replacement

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Hautreizung / Hautätzung	Transcutaneous Electrical Resistance test method (TER)	430	2004	2013/2015	Replacement
	In vitro skin corrosion: Reconstructed human epidermis test method (RhE)	431	2004	2013/2014/2015/2016/2019	Replacement
	In vitro membrane barrier test for skin corrosion	435	2006	2015	Replacement
	in vitro skin irritation: Reconstructed human epidermis test method (RhE)	439	2010	2013/2015/2019/2020***/2021	Replacement
Hautsensibilisierung	Skin Sensitization: Local Lymph Node Assay (LLNA)	429	2002	2010	Reduction Refinement
	Skin Sensitization: Local Lymph Node Assay: DA	442A	2010		Reduction Refinement
	Skin Sensitization: Local Lymph Node Assay: BrdU-ELISA	442B	2010	2018	Reduction Refinement
	In Chemico Skin Sensitisation: Direct Peptide Reactivity Assay (DPRA, ADRA)	442C	2015	2019/2020***/2021/2022	Replacement**
	In Vitro Skin Sensitisation: ARE-Nrf2 Luciferase Test Method (Keratinosens, LuSens)	442D	2015	2018/2022***	Replacement**

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	Key event based TG (KE3) including Human-cell line activation test (h-CLAT), U-SENS, IL8 LUC	442E	2016	2017/2022	Replacement**
	Guideline on Defined Approaches for Skin Sensitisation	497	2021	2023***	Replacement
Genotoxizität	Mammalian Erythrocyte Pig-a Gene Mutation Assay	470	2022		Reduction
	Bacterial reverse mutation test – Ames-Test	471	1983	1997/2020***	Replacement
	In vitro mammalian Chromosome Aberration Test	473	1983	1997/2014/ 2016/2017	Replacement
	In vitro mammalian cell gene mutation test using Hprt and xpvt genes	476	1984	1997/2015	Replacement
	In Vitro Mammalian Cell Micronucleus Test	487	2010	2014/2023***	Replacement
	Transgenic Rodent Somatic and Germ Cell Gene Mutation Assays	488	2011	2013/2020/ 2022	Reduction

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	In Vitro Mammalian Cell Gene Mutation Assays Using the Thymidine Kinase	490	2015		Replacement
Endokrine Wirkung	Performance based test guideline for the Stably Transfected Transcriptional Activation (STTA) Assay to detect estrogen receptor agonists and antagonists	455	2009	2012/2015/ 2016	Replacement*
	H295R Steroidogenesis Assay	456	2011	2022***/ 2023***	Replacement*
	Stably Transfected Human Androgen Receptor Transcriptional Activation Assay for Detection of Androgenic Agonist and Antagonist Activity of Chemicals	458	2016	2020/2023***	Replacement*
	Performance-Based Test Guideline for the human Recombinant Estrogen Receptor Alpha Binding Assays (hrER α)	493	2015		Replacement*

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Absorption und Metabolismus	Skin absorption: In vitro method	428	2004		Replacement
Phototoxizität	In Vitro 3T3 NRU Phototoxicity Test	432	2004	2019	Replacement
	Ros (Reactive Oxygen Species) Assay for Photoreactivity	495	2019		Replacement
	In vitro Phototoxicity: Reconstructed Human Epidermis Phototoxicity test method	498	2021	2023***	Replacement
Immunotoxizität	In vitro immunotoxicity IL-2 Luc Assay	444A	2023		Replacement**

* Screening and prioritisation only

** no stand-alone method. To be used in integrated approaches for testing and assessment

***minor corrections