



EUROPEAN COMMISSION

DIRECTORATE GENERAL - JRC
 JOINT RESEARCH CENTRE
 Institute for Health and Consumer Protection
Unit: Toxicology and Chemical Substances
European Chemicals Bureau

Testing Methods and Directives

Last updated: 18 May 2004

The tables in this document give an overview of the Directives currently in force that contain the Testing Methods of Annex V to Dir. 67/548/EEC. They are intended to identify in which Directive to find the current version of each Annex V method. Care has been taken to ensure that the information is correct, however one cannot exclude completely the possibility of errors. Only European Union legislation published in the paper editions of the Official Journal of the European Communities is deemed authentic. The Official Journals can be downloaded either from the Eur-Lex site (<http://europa.eu.int/eur-lex/>) or the EUDOR site (<http://eudor.eur-op.eu.int>).

Summary table

Method	Directive	OJ	ATP	Comments
A.1 to A.17 B.3 B.8 to B.9 C.1 to C.7	92/69/EEC	L 383 A 1992	17 th	B.1 deleted in 2001/59/EC B.1 bis , B.1 tris, B.4 and B.5 updated in 2004/73/EC B.2 modified in 93/21/EEC B.6 and B.7 updated in 96/54/EC B.10 to B.13/14 updated in 2000/32/EC A.7 does not exist (was deleted)
B.2	92/69/EEC 93/21/EEC	L 383 A 1992 L 110 1993	17 th 18 th	
B.15 to B.16, B.18 to B.22, B.24 and B.25, B.28 to B.30 B32 to B.34 B.36 C.8 to C.12	88/302/EEC ¹	L 133 1988	9 th	Numbering established in 96/54/EC. The algal test here was updated in 92/69/EEC B.17 and B.23 updated in 2000/32/EC B.26 and B. 27 Updated in 2001/59/ EC B.31 and B.35 updated in 2004/73/EC
Introduction part B B.6 B.7 B.37 B.38 Numbering from B.15 to B.38	96/54/EC	L 248 1996	22 nd	
A.18, A.19, A.20, C.13	98/73/EC	L 305 1998	24 th	
B.10 to B.13/14, B.17 B.23 B.39	2000/32/EC	L 136 2000	26 th	B.13/14 English version corrected in 2001/59/EC B.39 French version corrected in 2001/59/EC
B.40 and B.41	2000/33/EC	L 136 2000	27 th	B.41 English version corrected in 2001/59/EC
Introduction Part C	88/302/EEC ¹ 2000/32/EC	L 133 1988 L 136 2000	9 th 26 th	
B.26 and B.27	2001/59/EC	L 225 2001	28 th	

¹ Dir 88/302 was erroneously numbered 87/302, but this was corrected in a corrigendum that appeared in O.J. L 136 1988.

C.14 to C.20	2001/59/EC	L 225 2001	28th	
A.21 B.1bis and B.1tris B.4 and B.5 B.31 B.35 B.42 and B.43 C.21 to C.24	2004/73/EC	L152 2004		

Detailed Table – Annex V

		Directive	OJ	ATP	Notes
Introduction		92/69/EEC	L 383 A 1992	17th	

Detailed Table – Part A

Method	Title	Directive	OJ	ATP	Notes
Introduction Part A					
A.1	Melting/freezing temperature	92/69/EEC	L 383 A 1992	17th	
A.2	Boiling temperature	92/69/EEC	L 383 A 1992	17th	
A.3	Relative density	92/69/EEC	L 383 A 1992	17th	
A.4	Vapour pressure	92/69/EEC	L 383 A 1992	17^t	
A.5	Surface tension	92/69/EEC	L 383 A 1992	17th	
A.6	Water solubility	92/69/EEC	L 383 A 1992	17th	
A.8	Partition Coefficient	92/69/EEC	L 383 A 1992	17th	
A.9	Flash-point	92/69/EEC	L 383 A 1992	17th	
A.10	Flammability (solids)	92/69/EEC	L 383 A 1992	17th	
A.11	Flammability (gases)	92/69/EEC	L 383 A 1992	17th	
A.12	Flammability (contact with water)	92/69/EEC	L 383 A 1992	17th	
A.13	Pyrophoric properties of solids and liquids	92/69/EEC	L 383 A 1992	17th	
A.14	Explosive properties	92/69/EEC	L 383 A 1992	17th	
A.15	Auto-ignition temperature (liquids and gases)	92/69/EEC	L 383 A 1992	17th	
A.16	Relative self-ignition temperature for solids	92/69/EEC	L 383 A 1992	17th	
A.17	Oxidizing properties (solids)	92/69/EEC	L 383 A 1992	17th	
A.18	Number - average molecular weight and molecular weight distribution of polymers	98/73/EC	L 305 1998	24th	
A.19	Low molecular weight content of polymers	98/73/EC	L 305 1998	24th	
A.20	Solution / extraction behaviour of polymers in water	98/73/EC	L 305 1998	24th	
A.21	Oxidising Properties (liquids)	2004/73/EC	L 152 2004	29th	

Detailed Table – Part B

Method	Title	Directive	OJ	ATP	Notes
Introduction Part B		96/54/EC	L 248 1996	22nd	
B.1 DELETED	Acute toxicity (oral) DELETED	92/69/EEC	L 383 A 1992	17 th	DELETED in 2001/59/EC
B.1bis	Acute oral toxicity - fixed dose procedure	2004/73/EC	L 152 2004	29th	
B.1 tris	Acute oral toxicity – Acute toxic class method	2004/73/EC	L 152 2004	29th	
B.2	Acute toxicity (inhalation)	92/69/EEC 93/21/EEC	L 383 A 1992 L 110 1993	17th 18th	
B.3	Acute toxicity (dermal)	92/69/EEC	L 383 A 1992	17th	
B.4	Acute toxicity: dermal irritation/corrosion	2004/73/EC	L 152 2004	29th	
B.5	Acute toxicity: eye irritation/corrosion	2004/73/EC	L 152 2004	29th	
B.6	Skin sensitization	96/54/EC	L 248 1996	22nd	
B.7	Repeated dose (28 days) toxicity (oral)	96/54/EC	L 248 1996	22nd	
B.8	Repeated dose (28 days) toxicity (inhalation)	92/69/EEC	L 383 A 1992	17th	
B.9	Repeated dose (28 days) toxicity (dermal)	92/69/EEC	L 383 A 1992	17th	
B.10	Mutagenicity - In vitro mammalian chromosome aberration test	2000/32/EC	L 136 2000	26th	
B.11	Mutagenicity - In vivo mammalian bone-marrow chromosome aberration test	2000/32/EC	L 136 2000	26th	
B.12	Mutagenicity - In vivo mammalian erythrocyte micronucleus test	2000/32/EC	L 136 2000	26th	
B.13/14	Mutagenicity - reverse mutation test using bacteria	2000/32/EC	L 136 2000	26th	English version Title corrected in 2001/59/EC
B.15	Gene mutation – <i>Saccharomyces cerevisiae</i>	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.16	Mitotic recombination - <i>Saccharomyces cerevisiae</i>	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.17	Mutagenicity - In vitro mammalian cell gene mutation test	2000/32/EC	L 136 2000	26th	Numbering in 96/54/EC.
B.18	DNA damage and repair – unscheduled DNA synthesis – mammalian cells <i>in vitro</i>	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.19	Sister chromatid exchange assay <i>in vitro</i>	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.20	Sex-linked recessive lethal test in <i>Drosophila melanogaster</i>	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.21	<i>In vitro</i> mammalian cell transformation test	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.22	Rodent dominant lethal test	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.23	Mammalian spermatogonial chromosome aberration test	2000/32/EC	L 136 2000	26th	Numbering in 96/54/EC.
B.24	Mouse spot test	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.25	Mouse heritable translocation	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.26	Sub-chronic oral toxicity test. Repeated dose 90 - day oral toxicity study in rodents	2001/59/EC	L 225 2001	28th	Numbering in 96/54/EC.
B.27	Sub-chronic oral toxicity test. Repeated dose 90 - day oral toxicity study in non-rodents	2001/59/EC	L 225 2001	28th	Numbering in 96/54/EC.
B.28	Sub-chronic dermal toxicity test: 90-day repeated dermal dose study using rodent species	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.29	Sub-chronic inhalation toxicity test: 90-day repeated inhalation dose study using rodent species	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.30	Chronic toxicity test	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.31	Prenatal developmental toxicity study	2004/73/EC	L 152 2004	29th	Numbering in 96/54/EC.
B.32	Carcinogenicity test	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.33	Combined chronic toxicity/carcinogenicity test	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.34	One-generation reproduction toxicity test	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.35	Two-generation reproduction toxicity study	2004/73/EC	L 152 2004	29th	Numbering in 96/54/EC.

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B.36	Toxicokinetics	88/302/EEC	L 133 1988	9th	Numbering in 96/54/EC.
B.37	Delayed neurotoxicity of organophosphorus substances following acute exposure	96/54/EC	L 248 1996	22nd	
B.38	Delayed neurotoxicity of organophosphorus substances 28 day repeated dose study	96/54/EC	L 248 1996	22nd	
B.39	Unscheduled DNA synthesis (UDS) test with mammalian liver cells in vivo	2000/32/EC	L 136 2000	26th	French version corrected in 2001/59/EC
B.40	Skin Corrosion	2000/33/EC	L 136 2000	27th	
B.41	Phototoxicity - In vitro 3T3 NRU Phototoxicity Test	2000/33/EC	L 136 2000	27th	English version corrected in 2001/59/EC
B.42	Skin sensitisation: Local Lymph Node Assasy	2004/73/EC	L 152 2004	29th	
B.43	Neurotoxicity study in rodents	2004/73/EC	L 152 2004	29th	

Detailed Table – Part C

Method	Title	Directive	OJ	ATP	Notes
Introduction Part C		88/302/EEC 2000/32/EC	L 133 1988 L 136 2000	9th 26th	
C.1	Acute toxicity for fish	92/69/EEC	L 383 A 1992	17th	
C.2	Acute toxicity for Daphnia	92/69/EEC	L 383 A 1992	17th	
C.3	Algal inhibition test	92/69/EEC	L 383 A 1992	17th	
C.4 A to F	Biodegradation :determination of the “ready” biodegradability	92/69/EEC	L 383 A 1992	17th	
C.4-A	Dissolved organic carbon (DOC) die-away test	92/69/EEC	L 383 A 1992	17th	
C.4-B	Modified OECD screening test	92/69/EEC	L 383 A 1992	17th	
C.4-C	Carbon dioxide evolution test	92/69/EEC	L 383 A 1992	17th	
C.4-D	Manometric respirometry test	92/69/EEC	L 383 A 1992	17th	
C.4-E	Closed bottle test	92/69/EEC	L 383 A 1992	17th	
C.4-F	MITI test	92/69/EEC	L 383 A 1992	17th	
C.5	Degradation : biochemical oxygen demand	92/69/EEC	L 383 A 1992	17th	
C.6	Degradation : chemical oxygen demand	92/69/EEC	L 383 A 1992	17th	
C.7	Degradation : abiotic degradation : hydrolysis as a function of pH	92/69/EEC	L 383 A 1992	17th	
C.8	Toxicity for earthworms : artificial soil test	88/302/EEC	L 133 1988	9th	
C.9	Biodegradation : Zahn – Wellens test	88/302/EEC	L 133 1988	9th	
C.10	Biodegradation : activated sludge simulation test	88/302/EEC	L 133 1988	9th	
C.11	Biodegradation : activated sludge respiration inhibition test	88/302/EEC	L 133 1988	9th	
C.12	Biodegradation : modified SCAS test	88/302/EEC	L 133 1988	9th	
C.13	Bioconcentration : flow-through fish test	98/73/EC	L 305 1998	24th	
C.14	Fish juvenile growth test	2001/59/EC	L 255 2001	28th	
C.15	Fish, short-term toxicity test on <i>Embryo</i> and sac-fry stages	2001/59/EC	L 255 2001	28th	
C.16	Honeybees - Acute oral toxicity tes	2001/59/EC	L 225 2001	28th	
C.17	Honeybees – Acute contact toxicity test	2001/59/EC	L 225 2001	28th	
C.18	Adsorption/desorption using a batch equilibrium method	2001/59/EC	L 225 2001	28th	
C.19	Estimation of the adsorption coefficient (K_{oc}) on soil and sewage sludge using high performance liquid chromatography (HPLC)	2001/59/EC	L 225 2001	28th	
C.20	<i>Daphnia Magna</i> reproduction test	2001/59/EC	L 225 2001	28th	
C.21	Soil microorganisms: nitrogen transformation test	2004/73/EC	L 152 2004	29th	
C.22	Soil microorganisms: carbon transformation test	2004/73/EC	L 152 2004	29th	
C.23	Aerobic and anaerobic transformation in soil	2004/73/EC	L 152 2004	29th	
C.24	Aerobic and anaerobic transformation in aquatic sediment systems	2004/73/EC	L 152 2004	29th	