TEGOSOFT® AC MB

Summary of Product Data with Reference to Toxicology and Ecology*

Test	Method	Result	Date
Basic Toxicokinetics	OECD 417	rapid absorption, metabolisation and secretion [1)]	
Acute Oral Toxicity (rat)	OECD 423	LD_{50} > 2,000 mg/kg bw [2)]	
Acute Oral Toxicity (mouse)	OECD 401	LD_{50} > 4,300 mg/kg bw [3)]	
Acute Inhalation Toxicity (rat)	OECD 436	LC_{50} > 5.3 mg/L air [4)]	
Acute Inhalation Toxicity (rat)	OECD 436	LC_{50} > 5.3 mg/L air [5)]	
Acute Dermal Toxicity (rat)	OECD 402	LD_{50} > 2,000 mg/kg bw [6)]	
Acute Dermal Irritation/Corrosion (rabbit)	OECD 404	not irritating [2)]	
Acute Dermal Irritation/Corrosion (rabbit)	OECD 404	not irritating [3)]	
Acute Eye Irritation/Corrosion (rabbit)	OECD 405	not irritating [2)]	
Acute Eye Irritation/Corrosion (rabbit)	OECD 405	not irritating [7)]	
Acute Eye Irritation/Corrosion (rabbit)	OECD 405	not irritating [8)]	
Skin Sensitisation (guinea pig)	OECD 406	not sensitising [8)]	
Skin Sensitisation (guinea pig)	OECD 406	not sensitising [2)]	
90 day repeated dose toxicity (rat)	OECD 408	NOAEL = 1,000 mg/kg bw/day (actual dose) NOEL = 50 mg/kg bw/day (actual dose) [6)]	
Gene toxicity (Ames)	OECD 471	negative [2)]	
Gene toxicity (Ames)	OECD 471	negative [3)]	
Gene toxicity (Ames)	OECD 471	negative [8)]	
In-vitro mammalian chromosome aberration	OECD 473	negative [5)]	
In-vitro mammalian chromosome aberration	OECD 473	negative [2)]	
In-vitro mammalian cell gene mutation	OECD 476	negative [5)]	
In-vitro mammalian cell gene mutation	OECD 476	negative [2)]	

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Toxicity to reproduction (rat)	1993 FDA draft "Redbook II" guidelines	NOAEL = 5,500 mg/kg bw/day (actual dose received) 9)	
Toxicity to reproduction (rat)	no guideline followed	NOAEL fertility P ca. 6,000 mg/kg bw/day (nominal) NOAEL F1 ca. 6,000 mg/kg bw/day (nominal) 10)	
Biodegradability	OECD 301 B	91.3% (28d) readily biodegradable 11)	
Biodegradability	OECD 301 B	100% (28d) readily biodegradable 12)	
Bioaccumulation aquatic/sediment	OECD 417	Substance is rapidly and extensively hydrolysed to free oleic acid, absorbed, and delivered to tissue where it undergoes β-oxidation. 13)	
Adsorption / desorption	KOCWIN v2.00	Log Koc = 15.64 14)	
Adsorption / desorption	KOCWIN v2.00	Log Koc = 4.6 15)	
Adsorption / desorption	KOCWIN v2.00	Log Koc = 4.08 16)	
Adsorption / desorption	KOCWIN v2.00	Log Koc = 5.12 17)	
Acute fish toxicity	ISO 7346-1	LC_{50} (96h) > 10,000 mg/L 18)	
Acute fish toxicity	EPA 660/3-75-009 (1975)	LC_{50} (96h) > 10,000 mg/L 19)	
Acute daphnia toxicity	EU Method C.2	EC_{50} (48h) < 100 mg/L (nominal) EC_{50} (48h) > 0.05 mg/L (measured) 19)	
Acute daphnia toxicity	EU Method C.2	EL_{50} (48h) > 3,000 mg/L 18)	
Long term daphnia toxicity	OECD 202 and additional suggestions for OECD 202 part 2	NOELR (21d) > 100 mg/L 19)	
Acute algae toxicity	EU Method C.3	EL_{50} (72h) > 100 mg/L 20)	
Acute algae toxicity	EU Method C.3	EC_{50} (72h) < 100 mg/L 19)	
Toxicity to microorganisms	DIN 38412, part 8	EC_{50} (18h) > 10 mg/L 19)	
Toxicity to soil macroorganisms (earthworm)	OECD 207	LC_{50} (14d) > 20,000 mg/kg soil dw 19)	

1) Read-across from (14C) ethyl oleate

2) Weight of evidence approach; read-across from fatty acids, C16-18 and C18-unsatd., branched and linear, Bu esters

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3) Weight of evidence approach; read-across from hexyl laurate
4) Weight of evidence approach; read-across from fatty acids, tall oil, Bu esters
5) Weight of evidence approach; read-across from isopropyl laurate
6) Read-across from fatty acids, C16-18 and C18-unsatd., branched and linear, Bu esters
7) Weight of evidence approach; read-across from 2-ethylhexyl laurate
8) Weight of evidence approach; read-across from isopropyl myristate
9) Weight of evidence approach; read-across from ethyl oleate
10) Weight of evidence approach; read-across from butyl stearate
11) Weight of evidence approach; read-across from isopropyl palmitate
12) Weight of evidence approach; read-across from isopentyl laurate
13) Weight of evidence approach; read-across from (14C) ethyl oleate
14) (Q)SAR; calculation for C18 FA component
15) (Q)SAR; calculation for C14 FA component
16) (Q)SAR; calculation for C12 FA component
17) (Q)SAR; calculation for C16 FA component
18) Read-across from isopropyl palmitate
19) Read-across from isopropyl myristate
20) Read-across from C8-14-fatty acid-2-ethylhexyl ester

* Full Robust Study Summaries can be checked under the ECHA Registered Substance website and with the following registration number: 01-2120103377-63

Video instruction for use:
http://personal-care.evonik.com/product/personal-care/en/media-center/videos/reach-tox-data/pages/default.aspx