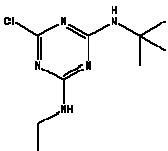


Summary report for Terbutylazine

SUMMARY

Substance name	Terbutylazine	
CAS-number	5915-41-3	
Proposed Quality Standard	Freshwater	
	AA-QS	MAC-QS
Water	0.5 µg/L	5.3 µg/L
Sediment	/	/
Remarks	data from dossier	

1. IDENTITY

Substance name	Terbutylazine
CAS-number	5915-41-3
Substance group	Algaecide, Herbicide, Microbiocide-Triazine
Synonyms	/
Molecular formula	C ₉ H ₁₆ ClN ₅
Structural formula	

Substance name	Diethyl-Terbutylazine
CAS-number	/
Substance group	Metabolite
Synonyms	/
Molecular formula	/
Structural formula	/

* Metabolite is not relevant due to the lack of toxicity data

2. PHYSICO-CHEMICAL PROPERTIES

Property	values	ref.
Molecular weight (g/mol)	229.7	dossier
Vapour Pressure (Pa)	1.49E-04	SRC exp.
Water Solubility (mg/L)	8.5	HSDB
Log K _{ow}	3.2	HSDB
Log K _{oc}	2.21-2.35 → 2.28	dossier
Log K _{SED}	0.91-1.05 → 0.98	est. from K _{oc} -5% OC
Henry-coefficient (Pa·m ³ /mol)	0.0038	HSDB
pK _a	/	/

3. FATE AND BEHAVIOUR IN THE ENVIRONMENT

Characteristic		ref.
BCF	33.7 (fish)	dossier
(Aerobic bio)degradation	Not biodegradable (degradation in weeks-monthes), hydrolytically stable	dossier

4. ECOTOXICITY (MS: most sensitive species of each group)**4.1.1 Aquatic toxicity Terbutylazine**

Species	Endpoint-acute	Value – (mg/l)	Endpoint-chronic	Value – (mg/l)	ref.	Number of tests for species	F/M	AF MAC-QS	AF AA-QS	MAC-QS (µg/l)	AA-QS (µg/l)
Algae											
<i>Scenedesmus subspicatus</i>	3d-EC50	0.016	(3d-NOEC extrapolated)	(0.016/3 = 0.0053)	dossier	MS	F	1	10	5.3*	0.53=0.5
Daphnids											
<i>Daphnia magna</i>	2d-EC50	69.3	21d-NOEC	0.21	dossier	MS	F				
Fish											
<i>Oncorhynchus mykiss</i>	4d-EC50	3.8	90d-NOEC	0.09	dossier	MS	F				
Other											
<i>Lemna gibba</i>	14d-EC50	0.017	(14d-NOEC extrapolated)	(0.017/3 = 0.0057)	dossier	MS	F				

* MAC-QS derived from AA-QS with a factor of 10