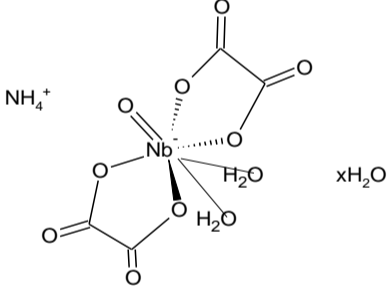


Version	Company	SUBSTANCE IDENTIFICATION PROFILE (SIP)
v.1		
5/31/2018	CBMM Europe BV	

No	1.1. Chemical Name	1.2. EC Number	1.3. CAS Number	1.4. Composition Type
	Ammonium Niobium Oxalate	939-559-9	None	Multi-Constituent

This Substance Identification Profile (SIP) is developed to represent the Identification parameters of the Substance described in line with the Substance Identification requirements of REACH Annex VI and relevant Guidances for the purpose to identify the

Reference	SI Parameter	Value / Not necessary / Not for SIP	Remark / Justification
2.1.A	Name or other Identifiers of the substance		
2.1.1.a	IUPAC Name	Reaction mass of ammonium (bisaquo oxobisoxalato) niobate hydrates and ammonium oxalate oxalic acid dihydrate	
2.1.1.b	Other International chemical name		
2.1.2.a	Chemical Name	Ammonium Niobium Oxalate	
2.1.2.b	Abbreviation	ANO	
2.1.2.c	Other names	Ammonium niobium oxide oxalate hydrates	
2.1.3.a	EC Number	939-559-9	
2.1.3.b	EC Name	Reaction mass of ammonium diaqua[bis(oxalate)]oxoniobate(1-) and ammonium hydrogen oxalate oxalic acid (1:1:1)	
2.1.3.c	EC Description		
2.1.4.a	CAS Number	None	
2.1.4.b	CAS Name	None	
2.1.4.c	CAS Description		
2.1.5.a	IUBMB Number		
2.1.5.b	INCI Number		
2.1.5.c	Other Catalogue identifiers		
2.1.B	Substances (with core identifiers) also falling under this substance (with justification)		
2.1.6.a	Chemical Name		
2.1.6.b	EC Number		
2.1.6.c	CAS Number		
2.1.7.a	Chemical Name		
2.1.7.b	EC Number		
2.1.7.c	CAS Number		
2.2	Information related to molecular and structural formula of the substance		
	Molecular Formula	C ₄ H ₈ NNbO ₁₁ .xH ₂ O, x= 0 - 8	Main Constituent 1 (MC1)
	Structural Formula		Also written as: (NH ₄ [NbO(C ₂ O ₄) ₂ • 2H ₂ O] • xH ₂ O); x = 0-8
	Smiles notation	[NH4+].O.O.O=C1O[Nb-]2(=O)(OC1=O)OC(=O)C(=O)O2	
	Molecular Weight	see molecular weight range	
	Molecular Weight range	339.012 - 483.134	
	Molecular Formula	C ₈ H ₁₄ N ₂ O ₁₆ .4H ₂ O	Main Constituent 2 (MC2)
	Structural Formula	2[NH ₄ (C ₂ HO ₄) • (C ₂ H ₂ O ₄) • 2(H ₂ O)]	
	Smiles notation	[NH4+].O.O.O=C(O)C([O-])=O.O=C(O)C(=O)O	
	Molecular Weight	466.2	
	Molecular Weight range		
2.3	Chemical Composition of the substance		
2.3.1	Main Constituent		
	Name -Main Constituent 1	Ammonium (bisaquo oxobisoxalato) niobate hydrates	IUPAC name: Ammonium oxobis(ethanedioato) bisniobate(V) hydrates
	CAS Number -Main Constituent 1	56245-84-2	
	EC Number -Main Constituent 1	None	
	Concentration range	≥ 68 - ≤ 74 %(w/w)	
	Name -Main Constituent 2	Ammonium oxalate oxalic acid dihydrate	IUPAC name: Ammonium hydrogen ethanedioate ethanedioic acid dihydrate
	CAS Number -Main Constituent 2	None	
	EC Number -Main Constituent 2	None	
	Concentration range	≥ 24 - 28 %(w/w)	

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2.3.2	Impurity / Impurities (above 1% or lower if contributing to the hazard or PTB profile)		
	Water (CAS 7732-18-5) $\geq 1 - \leq 3$ %(w/w) Inorganic impurities, $\geq 0.1 - \leq 1$ %(w/w)	Inorganic impurities might include Na, K, Cl, sulfate, ammonium, each < 1 %(w/w)	
2.3.3	Additive(s) (above 1% or lower if contributing to the hazard)		
2.3.3.a	Agreed strategy for Additives profile on SIP		
2.4	Substance sameness checking procedure		
2.4.1	Agreed Spectral data to be used	not applied	
2.4.2	Agreed Analytical Methods to be used	not applied	
2.4.3.a	Agreed Verification Method for sameness checking procedure (Consortium)	Suggest the following for main constituents: XRD (RIR method), ICP (Nb), ISE (NH ₄ ⁺); use ICP (Nb) and MW 393 (x=3, MC1) to quantify MC1. MC2 = 100% - Free water - MC1 Suggest the following for impurities: Water, free (Loss on drying: vacuum dessicator, 24 hr, RT) Metal impurities (ICP-OES) Anions (Ion chromatography) Cations (Ion chromatography)	Structure and assignment of 2 main constituents is additionally based on the description in the literature: Galesic, N., Brnicevic, N., J. Less-Common Met (1977), 51, 259-270. G. Portalone, M. Colapietro, Acta Cryst. (2006), E62, o4725-o4727.
2.4.3.b	Agreed conditions for the Verification Method (Consortium)		
2.4.3.c	Agreed Verification Method for sameness checking procedure (SIEF)		
2.4.3.d	Agreed conditions for the Verification Method (SIEF)		
2.4.4.a	Agreed role of the SIP in the SIEF		
2.4.4.b	Agreed person to be suggested as SIEF Formation Facilitator (if applicable)		

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2.5	Approval of the SIP		
2.5.1	Agreed approval method for the sameness checking procedure using this SIP (Consortium)		
2.5.2	Agreed approval method for the sameness checking procedure using this SIP (SIEF)		

By signing or otherwise approving this Substance Information Profile (SIP), the Company declares that he agrees with the content and purpose of this Substance Identification Profile.

He agrees that his substance does to the best of his knowledge completely fall under the substance identity being represented by the SIP sections 2.1 up to 2.3 sufficient for the purpose of meeting the SIEF requirements and opting for the joint submission Registration dossier to be created by the lead registrant in line with the REACH requirements.

He agrees to fulfil the requirements of the Verification Method described and agreed in the SIP Section 2.4 and takes the appropriate follow-up actions if the substance appears not to fall under the SIP agreed. He agrees that the final result of the Agreed Verification Method for sameness checking procedure is binding.

He agrees that he will inform the Consortium via the Secretariat or the SIEF via the Lead registrant if he has (new) information that might change the content of this SIP or if his Substance is changed in such a way that it might or does no longer fall under the SIP or might potentially have an impact on the content of the Registration dossier

He understands and agrees to be fully responsible for the proper linkage of the substance to the REACH Registration dossier and informing of his supply chain on the safe use of his substance and fulfilling his REACH requirements accordingly.