Version	Company
v.6	P-I236 AlFe REACH Consortium & SIEF
13.03.2017	KEMIRA

SUBSTANCE IDENTIFICATION PROFILE (SIP)

No	1.1. Chemical Name	1.2. EC Number	1.3. CAS Number	1.4. Composition Type
	Aluminium chloride hydroxide sulfate	254-400-7	39290-78-3	UVCB

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 Guidance's for the purpose to identify the substance sufficiently to meet the REACH registration requirements under the same joint submission.

The content of this SIP is developed by KEMIRA, discussed and agreed upon within the Consortium PI236 Alu salts to the best of their knowledge to be used for the purpose of substance identification and sameness checking process in the (pre-)SIEF and as base for being part of the same joint registration dossier under REACH.

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	Aluminium hydroxychlorosulphate	
2.1.1.b	Other International chemical name	Aluminum chloro hydroxy sulfate / Polyaluminium chloride hydroxide sulfate / Polyalminum hydroxychlorosulfate / Basic aluminum chloride sulfate / sulfate d'hydroxychlorure d'aluminium / sulfato hidróxido cloruro de aluminio / Aluminiumchloridhydroxidsulfat	
2.1.2.a	Chemical Name	**Aluminium chloride hydroxide sulfate**	Substance in category of soluble aluminium salts: Aluminium chloride (hydroxy) sulphate
2.1.2.b	Abbreviation	AHCS or ACHS	
2.1.2.c	Other names	Polyaluminium chloride sulfate	
2.1.3.a	EC Number	**254-400-7**	**For this EC Number is no molecular structure available**
2.1.3.b	EC Name **(Name in REACH-IT in Bold)**	**Aluminum chloride hydroxide sulfate**; Polyaluminium chloride hydroxide sulfate	
2.1.3.c	EC Description	Not available	
2.1.4.a	CAS Number	**39290-78-3**	
2.1.4.b	CAS Name	Aluminum chloride hydroxide sulfate	
2.1.4.c	CAS Description	Al . Cl . H O . O4 S	
2.1.5.c	Other Catalogue identifiers	EPA No.: P 89-192 ECL Serial No.: KE-00910	* January 2009 TSCA Inventory. Commencement to manufacture, Fed. Regist. 54 #159:34402 (18 Aug 1989); Fed. Regist. 55 #123:26009 (26 Jun 1990); Fed. Regist. 56 #26:4997 (07 Feb 1991). * On DSL Canada Gazette, Part II, January 8, 1997. * On EINECS Annex to Official Journal of the European Communities, 15 June 1990. REACH: Intermediate List of Pre-Registered Substances, October 2008 Internet: echa.europa.eu. * On ECL Korean Existing Chemicals List, January 1997. * On ASIA-PAC
2,2	**Information related to molecular and structural formula of the substance**		
2.2.1.a	Molecular Formula	**Having the generic molecular formula Al(OH)xCl(3-x-2y)(SO4)y where 0.6<x<2.5 and 0.05 < y < 0.5 and (x+y/2)<2.4**	All commercial water treating products are in liquid form or in water soluble form. Under UVCB this profile also covers any salts in the form defined by formula Al(OH)xCl(3-x-2y)(SO4)y where 0.6<x<2.5 and 0.05 < y < 0.5 and (x+y/2)<2.4 and where the physicochemical properties and hazard profile do not differ from those of Al(OH)ClSO4 Formula/ID as defined under CEN standards 881/2004 and 883/2004 for CAS 39290-78-3
2.2.1.b	Structural Formula	Not available for UVCB	For Al(OH)ClSO4 
2.2.1.c	Smiles notation	[OH-].[O-]S(=O)(=O)[O-].[Al].[Cl-] [OH-].[O-]S(=O)(=O)[O-].[Al+3].[Cl-] OOS(=O)(=O)OCl.[Al+3]	
2.2.2.a	Optical activity	Not available	
2.2.2.b	Typical ratio of (stereo) isomers	Not available	
2.2.3.b	Molecular Weight range	Under UVCB this profile include molecular weight range from 90.8 to 134.9, as defined by the above formula	
2.3	**Chemical Composition of the substance**		
2.3.1	**Main Constituent**		
2.3.1.a	Name -Main Constituent	Aluminium chloride hydroxide sulfate	
2.3.1.b	CAS Number -Main Constituent	39290-78-3	
2.3.1.c	EC Number -Main Constituent	254-400-7	
2.3.1.d	Concentration range -Main Constituent - Lower value	80%	
2.3.1.e	Concentration range -Main Constituent - Upper value	100%	
2.3.2	**Impurity / Impurities (above 1% or lower if contributing to the hazard or PTB profile)**		
2.3.2.a	Agreed strategy for Impurity profile on SIP	No impurities which affects the hazard profile and classification should be present. In this SIP a substance with impurities is considered as the same substance under this Joint Submission Registration. This SIP covers trace metal impurities as defined under CEN 881/2004 and 883/2004 standards for purity criteria (three types).	Under UVCB impurity profile is principally not relevant and up to the individual SIEF member to be covered in this registration and check possible impact on the C&L
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	No specifis additives as such	
2.4	**Substance sameness checking procedure**		
2.4.1	Agreed Spectral data to be used	The salts are in liquid form and will be analyzed by Inductively Coupled Plasma spectroscopy (ICP) **or by** X-Ray Fluorescence (XRF) **or by** Atomic Absorption Spectroscopy (AAS)	ICP: The equipment to be used should be able to analyse 50 elements, including chloride when analysing aluminium chlorides.; XRF: With this method all elements with atomic numbers above the one of Na can be assessed; AAS: This method shall only be used as a supporting method, as different lamps have to be used for each element analysed

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2.4.2	Agreed Analytical Methods to be used	The European Standards will be used as much as possible for analyzing macro and micro constituents (EN 1302:1999; Titrimetry; AA, ICP, MS); For macro elements titrimetry, ICP or AA conform methods in EN-1302); For quantification of heavy metals (micro elements) ICP-MS is recommended (see EU standard 1302) as alternative for Atomic Absorption (AA) spectrometry and ICP (ICP - OES). Presence of possible organic impurities will be analyzed by TOC.	For quantification of substances, European Standard EN 1302 methods are recommended to be used, such as complexometric titration
2.4.3.a	Agreed Verification Method for sameness checking procedure (Consortium)		
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)		
2.5	**Approval of the SIP**		
2.5.1	Agreed approval method for the sameness		
2.5.2	Agreed approval method for the sameness		

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 is to the best of his knowledge covered by the substance identity being described in this SIP for the purpose being sufficiently the same to meet the SIEF requirements and opting for the joint submission registration dossier to be created by the Lead Registrant in line with the REACH requirements.

If requested by the Lead Registrant, he agrees fulfilling the requirements for the SI Verification method of Section 2.4 and taking the appropriate follow-up actions consequently. He agrees that the results of the Verification method for the sameness checking procedure are binding.

He will inform the appropriate contact person (e.g. Lead Registrant) if he has new information that might affect the content of the SIP. He will inform the Lead Registrant if his substance might no longer meet the SIP Requirements or has a potential impact on the content of the Registration dossier.

This SIP is designed to and used by the Lead Registrants and SIEF Members to meet the substance sameness checking requirements in the SIEF. Parties will do its utmost best to settle possible conflicts between each other in good faith. If necessary an expert third party will be used to mediate between the parties up to a solution.

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.