

Version	Company		Substance Identity Profile of Potassium Nitrate	
2.0	FARM Consortium			
18/07/2017	SQM Europe N.V.			
No	1.1. Chemical Name	1.2. EC Number	1.3. CAS Number	1.4. Composition Type
1	Potassium nitrate	231-818-8	7757-79-1	Mono-constituent substance
<p><i>This Substance Identification Profile (SIP) is developed to represent the identification parameters of the Substance described below in line with the Substance Identification requirements of REACH Annex VI and Table 3 in Section 5 of the Guidance Document "IDENTIFICATION AND NAMING OF SUBSTANCES UNDER REACH AND CLP", Version 2.0, December 2016 with the purpose to agree upon being the same substance for the purpose of updating the registration dossier under Reach, and non-discriminatory to meet the REACH requirements for Registration.</i></p> <p><i>The SIP is developed by the above mentioned Company the best of their knowledge to be used to agree upon being the same substance for the purpose of the Consortium.</i></p>				
Reference	SI Parameter	Value / Not necessary / Not for SIP	Remark / Justification	
2.1	Name or other Identifiers of the substance			
2.1.1.a	IUPAC Name	Potassium nitrate		
2.1.1.b	Other International chemical name	Nitric acid, potassium salt		
2.1.2.a	Chemical Name	Potassium nitrate		
2.1.3.a	EC Number	231-818-8		
2.1.3.b	EC Name	Potassium nitrate		
2.1.3.c	EC Description	not available		
2.1.4.a	CAS Number	7757-79-1		
2.1.4.b	CAS Name	Potassium nitrate		
2.1.4.c	CAS Description			
2.2	Information related to molecular and structural formula of the substance			
2.2.1.a	Molecular Formula	KNO ₃		
2.2.1.b	Structural Formula	$\begin{array}{c} \text{O}^- \\ \\ \text{NO}_2 \end{array} \quad \text{K}^+$		
2.2.1.c	Smiles notation	O(N(=O)=O)K		
2.2.2.a	Optical activity	not applicable		
2.2.2.b	Typical ratio of (stereo) isomers	not applicable		
2.2.3.a	Molecular Weight	101,1		
2.2.4	Origin	inorganic		
2.3	Chemical Composition of the substance			
2.3.1	Main Constituent			
2.3.1.a	Name -Main Constituent	Potassium nitrate		
2.3.1.b	CAS Number -Main Constituent	7757-79-1		
2.3.1.c	EC Number -Main Constituent	231-818-8		
2.3.1.d	Concentration range -Main Constituent - Lower value	> 95 %	value in % w/w	
2.3.1.e	Concentration range -Main Constituent - Upper value	> 99 %	value in % w/w	
2.3.1.f	Typical concentration -Main Constituent (= Degree of purity)	> 97 %	value in % w/w	
2.3.2	Impurity / Impurities (above 1% or lower if contributing to the hazard or PTB profile)*			
2.3.2.0	Agreed strategy for Impurity profile on SIP	All impurities > 1% are other inorganic salts or other related inorganic substances, similar to the registered substance, and which do not significantly affect its toxicological and ecotoxicological properties. All other impurities do not lead to a different classification and labelling. Each registrant has to specify separately the impurities in their own product in the individual company-specific part of the registration dossier.		
2.3.2.1.a	Name			
2.3.2.1.b	CAS Number			
2.3.2.1.c	EC Number			
2.3.2.1.d	Molecular Formula			
2.3.2.1.e	Concentration range			
2.3.2.1.g	Typical concentration			
2.3.3	Additive(s) (above 1% or lower if contributing to the hazard)			
2.3.3.0	Agreed strategy for Additives profile on SIP	None to be considered in joint submission		
2.4	Substance sameness checking procedure			
2.4.1	Agreed Spectral data to be used	UV, IR can be used to support identity. XRD is a confirmation tool for the identity of the monoconstituent substance. NMR is not suitable for the whole substance as it only characterizes nitrate and nitrogen impurities in the substance. HPLC and Gas Chromatography not applicable. Ion Chromatography, either with conductivity detector (IC-CD) or mass detector (IC-MS) for the identification of main cation/anion as well as ionic impurities is strongly recommended.		
2.4.2	Agreed Analytical Methods to be used	Selected Bibliographical References: KNO ₃ Monograph, ACS Reagent Chemicals, 2017, Part 4. eISBN: 9780841230460		
2.4.3.a	Agreed Verification Method for sameness checking procedure			
2.4.3.b	Agreed conditions for the Verification Method			
2.4.4.a	Agreed role of the SIP in the SIEF			
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)			
<p><i>*Note. The Guidance Document "IDENTIFICATION AND NAMING OF SUBSTANCES UNDER REACH AND CLP", Version 2.0, December 2016, states at p.54: "No differentiation is made between technical, pure or analytical grades of the substances. This means that the "same" substance may have a different purity/impurity profile depending on its grade. However, well defined substances should contain the same main constituent(s) and the only impurities allowed are those derived from the production process (for details see Chapter 4.2) and additives which are necessary to stabilize the substance."</i></p>				
<p><i>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.</i></p> <p><i>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.</i></p> <p><i>He agrees to fulfill 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.</i></p> <p><i>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.</i></p> <p><i>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.</i></p>				