

Inorganic Phosphates REACH Consortium

Version	SUBSTANCE IDENTIFICATION PROFILE (SIP)
v.4	
26/02/21	

No	1.1. Chemical Name	1.2. EC Number	1.3. CAS Number	1.4. Composition Type
IP14	Tripotassium orthophosphate	231-907-1	7778-53-2	mono- constituent substance

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 for the purpose of identifying the registered substance and the provision of a 'boundary composition' for IUCLID 6 dossier updates.

Reference	SI Parameter	Value / Not necessary / Not for SIP	Remark / Justification		
2.1.A	Name or other Identifiers of the substance				
	CAS (hydrates)	27176-10-9, 22763-03-7, 22763-02- 6, 78436-05-2			
	SMILES	[O-]P(=O)([O-])[O-].[K+].[K+].[K+]			
	Molecular formula	НЗО4Р.ЗК			
	Structural image / diagram (indicative)	κ ⁺ κ ⁺ 0 ⁻ 0 ⁻ κ ⁺ 0 ⁻ () κ ⁺ 0 ⁻ 0 ⁻ κ ⁺			
	EU food legislation number / INS n°	E340iii			
	State / form	Solid: Particulate / Powder			
	Granulometry range		The substance is considered to be inhalable. Nano forms (in accordance with COMMISSION REGULATION (EU) 2018/1881 of 3 December 2018 on the definition of nanomaterial) have not been identified.		
	pH range for aqueous solutions	pH of 1% solution: pH 11.5-12.5 at 20°C			
2.1.B	Substances (with core identifiers) also falling under this substance (with justification)				
	Name or other Identifiers of the substance EC Number	Not applicable			
	CAS number				
	Additional information				

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2.3	Chemical Composition of	the substance	
2.3.1	Main Constituent		
	Name	Tripotassium orthophosphate	
	Typical concentration (%w/w)	93%	
	Concentration range (%w/w)	90 - ca. 100%	
2.3.2	Typical Impurity / Impuri	ties (above 1% or lower if contributing to the hazard or PBT profile)	
2.3.2.1	Name -Impurity (1)	Dipotassium orthophosphate	
	CAS Number -Impurity (1)	7758-11-4	
	EC Number -Impurity (1)	231-834-5	
	Molecular Formula - Impurity (1)	НЗО4Р.2К	
	Typical concentration (%w/w) -Impurity (1)	<5%	
	Concentration range (%w/w) -Impurity (1)	≥ 0 < 5%	
	Relevant for classification and labelling?	N	
2.3.2.2	Name -Impurity (2)	Dipotassium carbonate	
	CAS Number -Impurity (2)	584-08-7	
	EC Number -Impurity (2)	209-529-3	
	Molecular Formula - Impurity (2)	K2CO3	
	Typical concentration (%w/w) -Impurity (2)	<5%	
	Concentration range (%w/w) -Impurity (2)	≥ 0 < 5%	
	Relevant for classification and labelling?	Ν	
2.3.2.3	Name -Impurity (3)	Tetrapotassium pyrophosphate	
	CAS Number -Impurity (3)	7320-34-5	
	EC Number -Impurity (3)	230-785-7	
	Molecular Formula - Impurity (3)	Н4О7Р2.4К	
	Typical concentration (%w/w) -Impurity (3)	<2%	
	Concentration range (%w/w) -Impurity (3)	≥ 0 < 2%	
	Relevant for classification and labelling?	N	





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2.3.3	Additives
	Not relevant
2.4	Classification and labelling
Yes - see ECHA Chem website	
2.5	Justification for deviation from substance identity rules
Not applicable	