

Inorganic Phosphates REACH Consortium

Version	SUBSTANCE IDENTIFICATION PROFILE (SIP)
v.5	
17/05/2023	

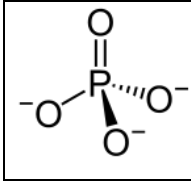
No	1.1. Chemical Name	1.2. EC Number	1.3. CAS Number	1.4. Composition Type
IP12	Potassium dihydrogenorthophosphate	231-913-4	7778-77-0	mono-constituent substance

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)	n/a	
	SMILES	OP(=O)(O)[O-].[K+]	
	Molecular formula	H2O4P.K or H3O4P.K	
	Structural image / diagram (indicative)		
	EU food legislation number / INS n°	E340i	
	State / form	Solid: Particulate/ Powder	
	Granulometry range	≥10% and ≤35% of particles have a diameter of <100µm	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	The pH of the solution, observed in the water solubility study, was pH 4.2-4.5	
2.1.B	Substances (with core identifiers) also falling under this substance (with justification)		
	Name or other Identifiers of the substance	Not applicable	
	EC Number		
	CAS number		

	<h2>Inorganic Phosphates REACH Consortium</h2>
--	--

	Additional information		
2.3	Chemical Composition of the substance		
2.3.1	Main Constituent		
	Name	Potassium dihydrogenorthophosphate	
	Typical concentration (%w/w)	80%	
	Concentration range (%w/w)	>70 -100%	
2.3.2	Typical Impurity / Impurities (above 1% or lower if contributing to the hazard or PBT profile) - create repeat blocks if necessary		
2.3.2.1	Name -Impurity (1)	Dipotassium hydrogenorthophosphate	
	CAS Number -Impurity (1)	7758-11-4	
	EC Number -Impurity (1)	231-834-5	
	Molecular Formula -Impurity (1)	H3O4P.2K	
	Typical concentration (%w/w) -Impurity (1)	<15%	
	Concentration range (%w/w) - Impurity (1)	≥ 0 < 15%	
	Relevant for classification and labelling?	N	
2.3.2.2	Name -Impurity (2)	Potassium sulphate	
	CAS Number -Impurity (2)	7778-80-5	
	EC Number -Impurity (2)	231-915-5	
	Molecular Formula -Impurity (2)	H2O4S.2K	
	Typical concentration (%w/w) -Impurity (2)	<10%	
	Concentration range (%w/w) - Impurity (2)	≥ 0 < 10%	
	Relevant for classification and labelling?	N	
2.3.2.3	Name -Impurity (3)	Calcium hydrogenorthophosphate	
	CAS Number -Impurity (3)	7757-93-9	
	EC Number -Impurity (3)	231-826-1	
	Molecular Formula -Impurity (3)	CaHPO4	
	Typical concentration (%w/w) -Impurity (3)	<5%	
	Concentration range (%w/w) - Impurity (3)	≥ 0 < 5%	
	Relevant for classification and labelling?	N	
2.3.2.4	Name -Impurity (4)	Potassium chloride	



Inorganic Phosphates REACH Consortium

	CAS Number -Impurity (4)	7447-40-7	
	EC Number -Impurity (4)	231-211-8	
	Molecular Formula -Impurity (4)	KCl	
	Typical concentration (%w/w) -Impurity (4)	<5%	
	Concentration range (%w/w) - Impurity (4)	≥ 0 < 5%	
	Relevant for classification and labelling?	N	
2.3.2.5	Name -Impurity (5)	Silicon dioxide	
	CAS Number -Impurity (5)	1314-11-0	
	EC Number -Impurity (5)	231-545-4	
	Molecular Formula -Impurity (5)	SiO ₂	
	Typical concentration (%w/w) -Impurity (5)	<4.9%	
	Concentration range (%w/w) - Impurity (5)	≥ 0 < 5%	
	Relevant for classification and labelling?	N	
2.3.2.6	Name -Impurity (6)	Sodium chloride	
	CAS Number -Impurity (6)	7647-14-5	
	EC Number -Impurity (6)	231-598-3	
	Molecular Formula -Impurity (6)	NaCl	
	Typical concentration (%w/w) -Impurity (6)	<4.1%	
	Concentration range (%w/w) - Impurity (6)	≥ 0 < 4.5%	
	Relevant for classification and labelling?	N	
2.3.2.7	Name -Impurity (7)	Other inorganic salts and oxides not influencing the toxicological/eco-toxicological properties of the substance	
	CAS Number -Impurity (7)	N/A	
	EC Number -Impurity (7)	N/A	
	Molecular Formula -Impurity (7)	N/A	
	Typical concentration (%w/w) -Impurity (7)	<9%	
	Concentration range (%w/w) - Impurity (7)	≥ 0 < 10%	
	Relevant for classification and labelling?	N	
2.3.3	Additives - create block similar to impurities if relevant		
	Not relevant		



2.4	Classification and labelling	Not classified
2.5	Justification for deviation from substance identity rules	not applicable