

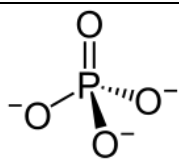
Inorganic Phosphates REACH Consortium

Version	SUBSTANCE IDENTIFICATION PROFILE (SIP)
v.5	
26/02/2020	

No	1.1. Chemical Name	1.2. EC Number	1.3. CAS Number	1.4. Composition Type
IP66	Triiron bis(orthophosphate)	239-018-0	14940-41-1	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)	10028-23-6	
	Synonyms	Ferrous orthophosphate Ferrous phosphate Iron(2+) phosphate Iron(II) orthophosphate Phosphoric acid, iron(2+) salt (2:3) octahydrate	
	SMILES	[O-]P(=O)([O-])[O-].[O-]P(=O)([O-])[O-].[Fe+2].[Fe+2].[Fe+2] Or octahydrate: O.O.O.O.O.O.O.O.[O-]P(O)([O-])[O-]P(=O)([O-])[O-].[Fe+2].[Fe+2].[Fe+2]	
	Molecular formula	Fe ₃ (PO ₄) ₂ or Fe ₂ /3H ₃ O ₄ P or Fe ₃ H ₆ O ₈ P ₂ or Fe ₃ (PO ₄) ₂ ·8H ₂ O or Fe ₃ O ₈ P ₂ (neutral salt)	
	Structural image / diagram (indicative)		
	EU food legislation number / INS n°	n/a	
	State / form	Solid: Particulate / Powder	



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	Granulometry range	Particle Size Distribution: D50 = 4.3 µm	
	pH range for aqueous solutions	pH 4-7 in 1% aqueous solution	
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		
	Additional information		
2.3	Chemical Composition of the substance		
2.3.1	Main Constituent		
	Name	Triiron bis(orthophosphate)	
	Typical concentration (%w/w)	>90%	
	Concentration range (%w/w)	80-100%	
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)	Iron (III) phosphate salts	
	CAS Number -Impurity (1)	10045-86-0	
	EC Number -Impurity (1)	233-149-7	
	Molecular Formula - Impurity (1)	FePO ₄ or FePO ₄ *2H ₂ O	
	Typical concentration (%w/w) -Impurity (1)	<10%	
	Concentration range (%w/w) -Impurity (1)	0<10%	
	Relevant for classification and labelling?	N	
2.3.2.2	Name -Impurity (2)	tetrairon tris(pyrophosphate)	
	CAS Number -Impurity (2)	10058-44-3	
	EC Number -Impurity (2)	233-190-9	
	Molecular Formula - Impurity (2)	Fe ₄ (P ₂ O ₇) ₃	
	Typical concentration (%w/w) -Impurity (2)	<10%	
	Concentration range (%w/w) -Impurity (2)	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	