

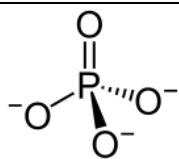
Inorganic Phosphates REACH Consortium

Version	SUBSTANCE IDENTIFICATION PROFILE (SIP)
v.3	
03/11/16	

No	1.1. Chemical Name	1.2. EC Number	1.3. CAS Number	1.4. Composition Type
IP64	Silicon orthophosphate	234-858-4	12037-47-7	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	
	Synonyms		
	SMILES	<chem>[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])=O.[Si+4].[Si+4].[Si+4]</chem> <chem>[O-].[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])=O.[Si+4].[Si+4].[Si+4].[Si+4].[Si+4]</chem>	
	Molecular formula	Si5(PO4)6O or Si5P6O25 or Si3(PO4)4	
	Structural image / diagram (indicative)	Si5-O-(PO4)6 Due to cristalline lattice pls. see Inorganica Chimica Acta Volume 208, Issue 1, 1 June 1993, Pages 23-29 Structural characterization of silicon orthophosphate, Poojary et al.	
	EU food legislation number / INS n°	n/a	
	State / form	Solid: particulate / Powder	
	Granulometry range		inhalable Depending on method of particle size determination it cannot be excluded that the substance falls under the



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			proposed horizontal EU nano definition from 2011, but since validated methodology is missing and a revision of the definition is expected, there is no way to confirm the status
	pH range for aqueous solutions	2.5 -3	
2.1.B	Substances (with core identifiers) also falling under this substance (with justification)		
	Name or other Identifiers of the substance	Not applicable	
2.3	Chemical Composition of the substance		
2.3.1	Main Constituent		
	Name	Silicon 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)	Silicon pyrophosphate	
	CAS Number -Impurity (1)	13827-38-8	
	EC Number -Impurity (1)	237-538-2	
	Molecular Formula - Impurity (1)	O7P2Si	
	Typical concentration (%w/w) -Impurity (1)	<20%	
	Concentration range (%w/w) -Impurity (1)	> 0 ≤ 20 %	
	Relevant for classification and labelling?	N	
2.3.3	Additives - create block similar to impurities if relevant		
	Not relevant		
2.4	Classification and labelling		
	Yes - See ECHA Chem website		
2.5	Justification for deviation from substance identity rules		
	not applicable		