



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
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	51890-38-1	
	Synonyms	Silicon oxide phosphate	
	SMILES	[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])([O-])=O.[O-][P]([O-])([O-])([O-])=O.[O-][P]([O-])([O-])([O-])=O.[Si+4].[Si+4].[Si+4] [O-].[O-][P]([O-])([O-])=O.[O-][P]([O-])([O-])([O-])=O.[O-][P]([O-])([O-])([O-])=O.[O-][P]([O-])([O-])([O-])=O.[O-][P]([O-])([O-])([O-])=O.[Si+4].[Si+4].[Si+4].[Si+4].[Si+4]	
	Molecular formula	Si5(PO4)6O or Si5P6O25 or Si3(PO4)4	
	Structural image / diagram (indicative)		
	EU food legislation number / INS n°	n/a	
	State / form	Solid: particulate / Powder	
	Granulometry range		The substance is considered to

	<h2>Inorganic Phosphates REACH Consortium</h2>
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			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	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)		
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		
Not relevant			
2.4	Classification and labelling		
Yes - see ECHA Chem website			
2.5	Justification for deviation from substance identity rules		
Not applicable			