



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
IP28	Tetrairon tris(pyrophosphate)	233-190-0	10058-44-3	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	Ferric (III) pyrophosphate	
	SMILES	[O-]P(=O)([O-])OP(=O)([O-])[O-].[O-]P(=O)([O-])OP(=O)([O-])[O-].[O-]P(=O)([O-])OP(=O)([O-])[O-].[Fe+3].[Fe+3].[Fe+3].[Fe+3]	
	Molecular formula	Fe ₃ /4H ₄ O ₇ P ₂ or Fe ₄ O ₂₁ P ₆	
	Structural image / diagram (indicative)		
	EU food legislation number / INS n°	n/a	
	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 3.0 to 5.0 at 0° and 10g/l slurry	
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	Tetrairon tris(pyrophosphate)	
	Typical concentration (%w/w)	97%	
	Concentration range (%w/w)	95-c.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)	Sodium sulphate	
	CAS Number -Impurity (1)	7757-82-6	
	EC Number -Impurity (1)	231-820-9	
	Molecular Formula - Impurity (1)	H2O4S.2Na	
	Typical concentration (%w/w) -Impurity (1)	≤3%	
	Concentration range (%w/w) -Impurity (1)	0-3%	
	Relevant for classification and labelling?	N	
2.3.2.2	Name -Impurity (2)	Iron(III)orthophosphate	
	CAS Number -Impurity (2)	10045-86-0	
	EC Number -Impurity (2)	233-149-7	
	Molecular Formula - Impurity (2)	Fe.H3O4P	
	Typical concentration (%w/w) -Impurity (2)	≤3%	
	Concentration range (%w/w) -Impurity (2)	0-3%	
	Relevant for classification and labelling?	N	
2.3.2.3	Name -Impurity (3)	Tetrasodium pyrophosphate	
	CAS Number -Impurity (3)	7722-88-5	
	EC Number -Impurity (3)	231-76-1	
	Molecular Formula - Impurity (3)	Na4P2O7	
	Typical concentration (%w/w) -Impurity (3)	<1%	
	Concentration range (%w/w) -Impurity (3)	0 - <1%	
	Relevant for classification and labelling?	N	
2.3.3	Additives		



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