

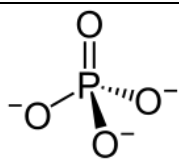
	<h2>Inorganic Phosphates REACH Consortium</h2>
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Version	<b>SUBSTANCE IDENTIFICATION PROFILE (SIP)</b>
v.3	
02/11/16	
6	

No	1.1. Chemical Name	1.2. EC Number	1.3. CAS Number	1.4. Composition Type
IP21	Calcium bis(dihydrogen-orthophosphate)	231-837-1	7758-23-8	mono-constituent

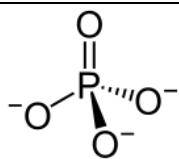
*This Substance Identification Profile (SIP) is developed to represent the Identification parameters of the substance described in line with the Substance Identification requirements of REACH Annex VI and relevant guidance for the purpose of identifying the registered substance and the provision of a 'boundary composition' for IUCLID 6 dossier updates.*

Reference	SI Parameter	Value / Not necessary / Not for SIP	Remark / Justification
<b>2.1.A</b>	<b>Name or other Identifiers of the substance</b>		
	CAS (hydrates)	10031-30-8, 65996-95-4	
	synonyms	Monocalcium Phosphate (MCP), Monobasic Calcium Phosphate, Triple Super Phosphate	
	SMILES	OP(=O)(O)[O-].OP(=O)(O)[O-].[Ca+2]	
	Molecular formula	Ca <sub>2</sub> (H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> or Ca <sub>2</sub> H <sub>3</sub> O <sub>4</sub> P or CaH <sub>4</sub> O <sub>8</sub> P <sub>2</sub>	
	Structural image / diagram (indicative)		
	EU food legislation number / INS n°	E341i	
	State / form	Solid: Particulate / Powder	
	Granulometry range	Ca. 100% of particles have a diameter of <100µm	<p>Considered to pose an inhalation risk</p> <p>Depending on method of particle size determination it cannot be excluded that the substance falls under the proposed horizontal EU nano definition from 2011, but since validated</p>



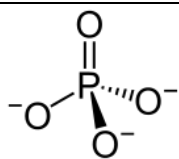
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			methodology is missing and a revision of the definition is expected, there is no way to confirm the status.
	pH range for aqueous solutions	The pH of the solution observed in the water solubility study was pH 2.4	
<b>2.1.B</b>	<b>Substances (with core identifiers) also falling under this substance (with justification)</b>		
	Name or other Identifiers of the substance	Not applicable	
<b>2.3</b>	<b>Chemical Composition of the substance</b>		
<b>2.3.1</b>	<b>Main Constituent</b>		
	Name	Calcium bis(dihydrogenorthophosphate)	
	Typical concentration (%w/w)	80%	
	Concentration range (%w/w)	70-100%	
<b>2.3.2</b>	<b>Typical Impurity / Impurities (above 1% or lower if contributing to the hazard or PBT profile) - create repeat blocks if necessary</b>		
2.3.2.1	Name -Impurity (1)	Calcium hydrogenorthophosphate	
	CAS Number -Impurity (1)	7757-93-9	
	EC Number -Impurity (1)	231-826-1	
	Molecular Formula -Impurity (1)	CaHPO4	
	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)	Calcium sulphate	
	CAS Number -Impurity (2)	7778-18-9	
	EC Number -Impurity (2)	231-900-3	
	Molecular Formula -Impurity (2)	Ca.H2O4S	
	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)	Mineral phosphate rock	
	CAS Number -Impurity (3)	1306-05-4	
	EC Number -Impurity (3)	215-144-1	
	Molecular Formula -Impurity (3)	N/A	
	Typical concentration (%w/w) - Impurity (3)	<10%	
	Concentration range (%w/w) -	≥0 < 10%	



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	Impurity (3)		
	Relevant for classification and labelling?	N	
2.3.2.4	Name -Impurity (4)	Orthophosphoric acid	
	CAS Number -Impurity (4)	7664-38-2	
	EC Number -Impurity (4)	231-633-2	
	Molecular Formula -Impurity (4)	H3O4P	
	Typical concentration (%w/w) - Impurity (4)	<5%	
	Concentration range (%w/w) - Impurity (4)	≥0 < 10%	
	Relevant for classification and labelling?	N	
2.3.2.5	Name -Impurity (5)	Iron orthophosphate	
	CAS Number -Impurity (5)	10045-86-0	
	EC Number -Impurity (5)	233-149-7	
	Molecular Formula -Impurity (5)	Fe.H3O4P	
	Typical concentration (%w/w) - Impurity (5)	<5%	
	Concentration range (%w/w) - Impurity (5)	≥0 < 10%	
	Relevant for classification and labelling?	N	
2.3.2.6	Name -Impurity (6)	Magnesium Salts - various mixture	Mixture of the following: - magnesium hydrogenorthophosphate (EC 231-823-5) - Magnesium hexafluorosilicate (EC 241-022-2) -Magnesium bis (dihydrogenorthophosphate ) (EC 236-004-6)
	CAS Number -Impurity (6)		
	EC Number -Impurity (6)		
	Molecular Formula -Impurity (6)		
	Typical concentration (%w/w) - Impurity (6)	<5%	
	Concentration range (%w/w) - Impurity (6)	≥0 < 5%	
	Relevant for classification and labelling?	N	
2.3.2.7	Name -Impurity (7)	Aluminium orthophosphate	
	CAS Number -Impurity (7)	7784-30-7	
	EC Number -Impurity (7)	232-056-9	
	Molecular Formula -Impurity (7)	Al.3HO3P	
	Typical concentration (%w/w) - Impurity (7)	<2%	
	Concentration range (%w/w) - Impurity (7)	≥0 < 2%	
	Relevant for classification and labelling?	N	
2.3.2.8	Name -Impurity (8)	Calcium carbonate	



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	CAS Number -Impurity (8)	471-34-1	
	EC Number -Impurity (8)	207-439-9	
	Molecular Formula -Impurity (8)	CaCO <sub>3</sub>	
	Typical concentration (%w/w) - Impurity (8)	<2.6%	
	Concentration range (%w/w) - Impurity (8)	≥0 < 2.6%	
	Relevant for classification and labelling?	N	
<b>2.3.3</b>	<b>Additives - create block similar to impurities if relevant</b>		
	Not relevant		
<b>2.4</b>	<b>Classification and labelling</b>		
	Yes - see ECHA Chem website		
<b>2.5</b>	<b>Justification for deviation from substance identity rules</b>		
	<p>In accordance with ECHA Guidance for identification and naming of substances under REACH and CLP, version 1.4, when the concentration of the main constituent is &lt;70% the following requirement(s) are met:</p> <ol style="list-style-type: none"> <li>1. The substance has been shown to have similar physico-chemical properties and the same hazard profile as other mono-constituent substances with the same identity that fulfil the 80% rule.</li> </ol> <p>and/or</p> <ol style="list-style-type: none"> <li>2. The range of concentrations for the main constituent and the impurities overlap the 80% criterion and the main constituent is only occasionally ≤ 80%.</li> </ol>		