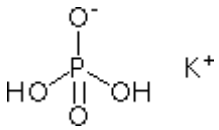
| Version |
|---|
| v.5 |
| 17/05/2023 |

**SUBSTANCE IDENTIFICATION PROFILE (SIP)**

| No | 1.1. Chemical Name | 1.2. EC Number | 1.3. CAS Number | 1.4. Composition Type |
|---|---|---|---|---|
| IP12 | Potassium dihydrogenorthophosphate | 231-913-4 | 7778-77-0 | 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 | |
| | SMILES | OP(=O)(O)[O-].[K+] | |
| | Molecular formula | H2O4P.K or H3O4P.K | |
| | Structural image / diagram (indicative) |  | |
| | EU food legislation number / INS n° | E340i | |
| | State / form | Solid: Particulate/ Powder | |
| | Granulometry range | ≥10% and ≤35% of particles have a diameter of <100µm | 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 | The pH of the solution, observed in the water solubility study, was pH 4.2-4.5 | |
| **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 | Potassium dihydrogenorthophosphate | |
| | Typical concentration (%w/w) | 80% | |
| | Concentration range (%w/w) | >70 -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) | Dipotassium hydrogenorthophosphate | |
| | CAS Number -Impurity (1) | 7758-11-4 | |
| | EC Number -Impurity (1) | 231-834-5 | |
| | Molecular Formula -Impurity (1) | H3O4P.2K | |
| | 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) | Potassium sulphate | |
| | CAS Number -Impurity (2) | 7778-80-5 | |
| | EC Number -Impurity (2) | 231-915-5 | |
| | Molecular Formula -Impurity (2) | H2O4S.2K | |
| | 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) | Calcium hydrogenorthophosphate | |
| | CAS Number -Impurity (3) | 7757-93-9 | |
| | EC Number -Impurity (3) | 231-826-1 | |
| | Molecular Formula -Impurity (3) | CaHPO4 | |

| | | | |
|---|---|---|---|
| | Typical concentration (%w/w) -Impurity (3) | <5% | |
| | Concentration range (%w/w) -Impurity (3) | ≥ 0 < 5% | |
| | Relevant for classification and labelling? | N | |
| 2.3.2.4 | Name -Impurity (4) | Potassium chloride | |
| | CAS Number -Impurity (4) | 7447-40-7 | |
| | EC Number -Impurity (4) | 231-211-8 | |
| | Molecular Formula -Impurity (4) | KCl | |
| | Typical concentration (%w/w) -Impurity (4) | <5% | |
| | Concentration range (%w/w) -Impurity (4) | ≥ 0 < 5% | |
| | Relevant for classification and labelling? | N | |
| 2.3.2.5 | Name -Impurity (5) | Silicon dioxide | |
| | CAS Number -Impurity (5) | 1314-11-0 | |
| | EC Number -Impurity (5) | 231-545-4 | |
| | Molecular Formula -Impurity (5) | SiO2 | |
| | Typical concentration (%w/w) -Impurity (5) | <4.9% | |
| | Concentration range (%w/w) -Impurity (5) | ≥ 0 < 5% | |
| | Relevant for classification and labelling? | N | |
| 2.3.2.6 | Name -Impurity (6) | Sodium chloride | |
| | CAS Number -Impurity (6) | 7647-14-5 | |
| | EC Number -Impurity (6) | 231-598-3 | |
| | Molecular Formula -Impurity (6) | NaCl | |
| | Typical concentration (%w/w) -Impurity (6) | <4.1% | |
| | Concentration range (%w/w) -Impurity (6) | ≥ 0 < 4.5% | |
| | Relevant for classification and labelling? | N | |
| 2.3.2.7 | Name -Impurity (7) | Other inorganic salts and oxides not influencing the toxicological/eco-toxicological properties of the substance | |
| | CAS Number -Impurity (7) | N/A | |
| | EC Number -Impurity (7) | N/A | |
| | Molecular Formula -Impurity (7) | N/A | |

| | | | |
|---|---|---|---|
| | Typical concentration (%w/w) -Impurity (7) | <9% | |
| | Concentration range (%w/w) -Impurity (7) | ≥ 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 | | | |