

di-Phosphorus pentoxide, for analysis, ExpertQ®, ACS, ISO

Identification

P₂O₅
M = 141,96 g/mol
CAS [1314-56-3]
EC number: 215-236-1
Taric code: 2809 10 00

Synonyms

Phosphoric anhydride

Applications

analytical chemistry, synthesis of organic products, manufacture of dyes, desiccant.

Specifications

assay (acidimetric).....	min. 99,5 %	cobalt (Co).....	max. 5 ppm
identity.....	passes test	copper (Cu).....	max. 5 ppm
insoluble in water.....	max. 0,005 %	heavy metals (as Pb).....	max. 0,005 %
chlorides (Cl).....	max. 0,001 %	iron (Fe).....	max. 0,001 %
nitrates (NO ₃).....	max. 0,0005 %	lead (Pb).....	max. 5 ppm
total nitrogen (as N).....	max. 0,002 %	magnesium (Mg).....	max. 0,001 %
ammonium (NH ₄).....	max. 0,001 %	manganese (Mn).....	max. 5 ppm
antimony (Sb).....	max. 0,001 %	nickel (Ni).....	max. 5 ppm
arsenic (As).....	max. 0,01 %	potassium (K).....	max. 0,002 %
cadmium (Cd).....	max. 5 ppm	sodium (Na).....	max. 0,005 %
calcium (Ca).....	max. 0,005 %	zinc (Zn).....	max. 5 ppm
		substances reducing KMnO ₄ (as P ₂ O ₃).....	max. 0,02 %

Physical data

- Appearance: powder, white
- Spec. Density: 2,40 g/cm³
- Bulk density: ~ 700 kg/m³
- Solub. in water: (20 °C): hydrolysis reaction
- Melting point: ~ 580 - 585 °C
- Boiling point: 591 °C
- Vapour pressure: (20 °C) < 0,1 hPa
- pH(5 g/l H₂O, 20 °C) 1
- Hygroscopic

Safety - GHS

Signal Word: Danger

Hazard Statements:

H314: Causes severe skin burns and eye damage.
EUH014: Reacts violently with water.

**Precautionary Statements:**

P260: Do not breathe dust / fume / gas / mist / vapours / spray.
P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor / physician.
P405: Store locked up.
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Transport/storage

- ADR: 8 C2 II • UN 1807 • PHOSPHORUS PENTOXIDE
- IMDG: 8 II • UN 1807 • PHOSPHORUS PENTOXIDE
- IATA/ICAO: 8 II • UN 1807 • PHOSPHORUS PENTOXIDE
- PAX: 815
- CAO: 817