### Specification

#### Proteinase K, recombinant

- **Synonym**: [E.C. 3.4.21.14]
- **delivery form**: lyophilized
- **origin**: from *Pichia pastoris*
- **Solubility (H₂O; 20°C)**: clear, colorless (20 mg/ml)
- **pH optimum**: 7.5 - 10.5
- **M**: 28.8 kD
- **CAS-No.**: 39450-01-6
- **HS-No.**: 35079090
- **EC-No.**: 254-457-8
- **Storage**: 2-8°C
- **LGK**: 10 - 13

**Hazard pictogram(s)**

**Hazard statement(s)**: H315-H319-H334-H335

**Precautionary statement(s)**: P280-P302+P352-P304+P340-P305+P351+P338-P342+P31

**Signal word**: Danger

**WGK**: 1

#### Specification

- **DNases/RNases**: not detectable
- **Activity/mg**: min. 30 mAnsonU
- **Appearance**: white lyophilizate
- **DNA (threshold)**: ≤ 10 pg/mg enzyme
- **Bioburden**: ≤125 cfu/g
Proteinase K, recombinant

Comment

Recombinant Proteinase K is used e.g. during nucleic acid isolation to inactivate DNases and RNases. It can be used for digestion of cells (bacteria too) and tissue. During production of this enzyme, almost all nucleic acids are removed. Therefore, this enzyme is suited for applications in sensitive PCR reactions, where exogenous nucleic acids may interfere.

Unit definition (hemoglobin): One unit is defined as the enzyme activity which releases folin positive amino acids and peptides equivalent to 1 μmol of tyrosine in 1 minute under the test conditions.