



pharm
TECHNOLOGY



Explorare igitur
Academia ac curata

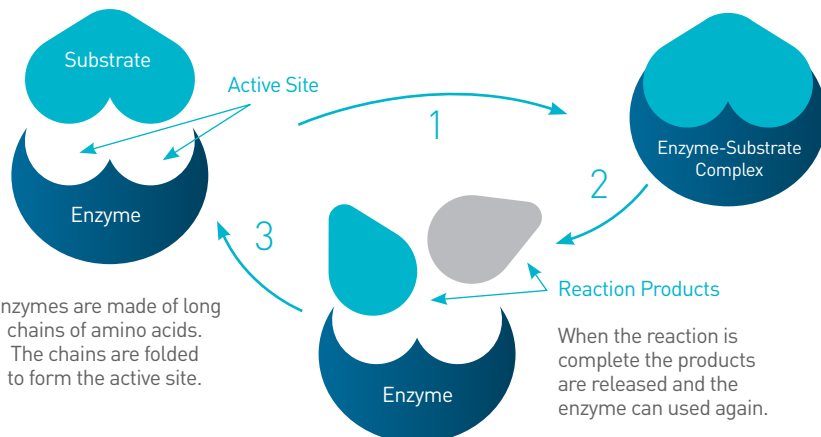
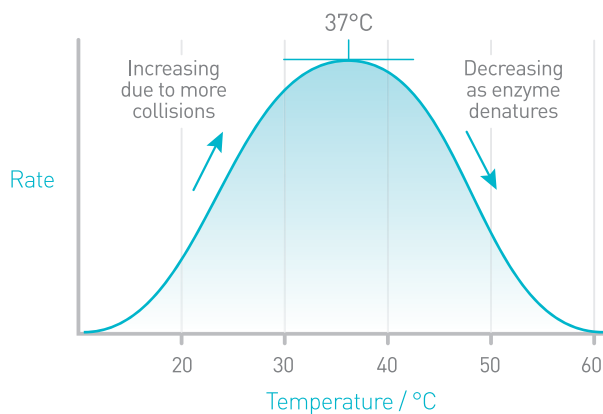
Key to pharm technology

www.k2pharm.cz

1.

SET – Systemic Enzyme Support Advantage of Fungal Protease use

- Optimum activity at human temperature (37°C)
- Acidoresistant fungal protease don't need protection in stomach
- Active throughout the whole gastrointestinal tract
- Part can be absorbed through mucous intestinal membrane
- Typical dosis schema: 2 tablets daily (between meals)
- Very low toxicity = fungal protease is SAFE



Enzymes are made of long chains of amino acids. The chains are folded to form the active site.

When the reaction is complete the products are released and the enzyme can be used again.

2.

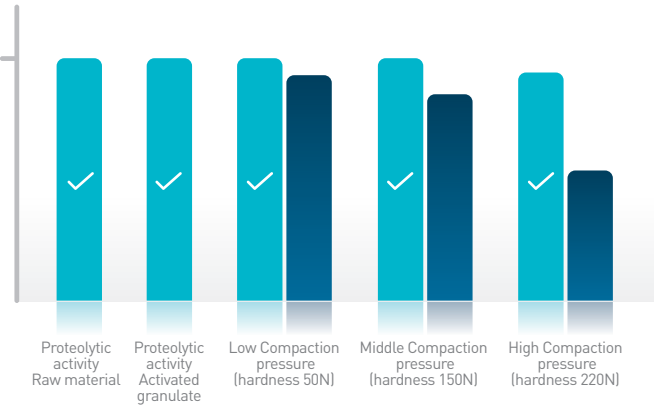
How do they work?

3.

Soft tableting ✓ Standard tableting method

- Soft tableting - a new concept to tablet pressure-sensitive materials
- Tableting using excipients with greater elastic deformation was used
- The crushing force of the tablets was analyzed
- Enzymes activity in tablets were evaluated

50.000 HUT/ tbl.



4.

Activity evaluation – HUT/g

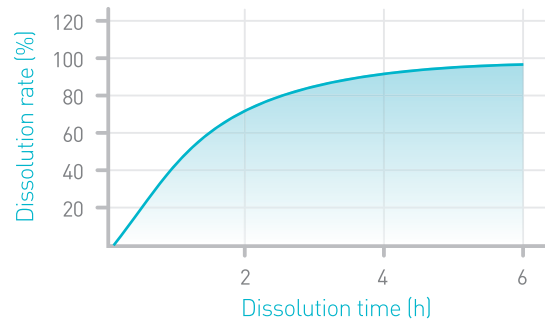
- In vitro testing to determine the proteolytic activity, expressed as hemoglobin units on the tyrosine basis (HUT)
- The test is based on the 30 minute enzymatic hydrolysis of a hemoglobin substrate at pH 4.7 and 40°C
- Unhydrolyzed substrate is precipitated with trichloroacetic acid and removed by filtration
- The quantity of solubilized hemoglobin in the filtrate is determined spectrophotometrically (275 nm)

5.

HITECH technology Soft tableting, sustained release, multilayer coating

- Very low pressure necessary to press tablets – enzymes keep their proteolytic activity (Soft tableting)
- Sustained release from tablets – dissolution profile for 4-6 hours
- Multilayer coating – preincubation with piperin trapped in 2nd coating layer = much higher amount of absorbed enzymes to blood stream

Sustained release Dissolution test result



7.

Proper clinical approach

- Chronopharmacokinetics/chronopharmacology
- Different time of use according different disease
- Preferred use on an empty stomach

6.

Indications

Reducing inflammation, oedema, fibrinolytic activity

Composition: Fungal protease, betaescin, piperin
Dosing scheme: 2 tablets daily (between meals)

Infection and sepsis prevention

Composition: Lactenin (milk glycoproteins), fungal protease
2 tablets daily (between meals)

Gynecological cyste prevention

Composition: Fungal protease, pancreatin
2 tablets morning (1 hour before meal)

Cellulitis

Composition: Fungal protease, cocoa extract, piperin
3 tablets daily (1 hour before meal)

Post trauma/post surgery recovery

Composition: Fungal protease, hesperidin, piperin
2 tablets (between meals)

We don't offer DIGESTIVE enzyme

We offer protease enzyme
with HEALING effect !!!

