Laccase PP

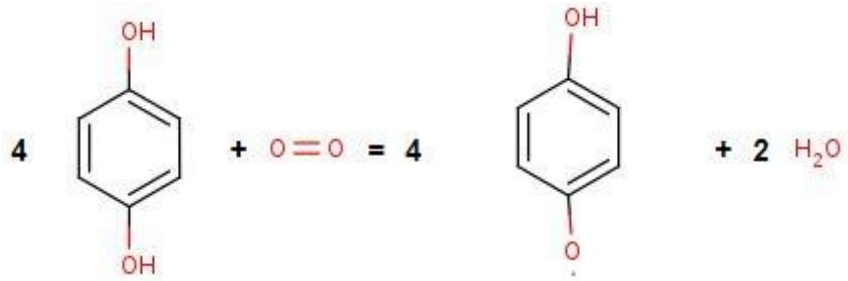
Benzenediol: oxygen oxidoreductase, E.C. 1.10.3.2

Description:

Enzyme preparation which oxidised monovalent and polyvalent phenolic compounds. It catalyses reactions to products similar like humic substances under less oxygenic conditions. Basically, Laccase oxidises ortho- and para-diphenols into the corresponding chinones and phenoxy radicals which polymerises spontaneously and are precipitated in the solution.

Laccase PP has a pH optimum in neutral values.

Catalysed reaction:



Phenol + O_2 → *Chinone radical* + H_2O

Origin:

Classified (non GMO)

Application:

Precipitation of phenolic substances

Enzymatic browning of food (cacao, coffee)

Glueing of flake boards

Modification of elasticity and consistency of pastes, gums, dispersion media, phenolic resins

Production of microbicides

Analysis of phenols

Activity:

> 250 U/ g
(Substrate: Syringaldazin)

Specific activity:

> 15 U/ mg Protein

ASA Spezialenzyme GmbH
Am Exer 19 C
38302 Wolfenbüttel
Germany

Tel.: +49 (0)5331 8825-30
Fax: +49 (0)5331 8825-32

E-mail: service@asa-enzyme.de
Internet: www.asa-enzyme.de

Parameter:	pH	Optimum: 7, effective in the range of pH 4.5 - 8
	Temperature	Optimum: 55°C, effective in the range of 20 - 70°C
Article-no.:	2040	
Form of delivery:	Dark brown powder/ lyophilizate	
Stability:	Stable at 4 – 6 °C, temperatures down to -20°C are possible	
Storage:	at 4 – 6°C, storage down to – 20°C is possible	

Literature:

[1] Wood, D.A., (1979), J. Gen. Microbiol., 117, 327-338
[2] Ming-Qiang Ai, (2015), J. Microbiol. Biotechnol., 25(8), 1361-1370

ASA Spezialenzyme GmbH
Am Exer 19 C
38302 Wolfenbüttel
Germany

Tel.: +49 (0)5331 8825-30
Fax: +49 (0)5331 8825-32

E-mail: service@asa-enzyme.de
Internet: www.asa-enzyme.de