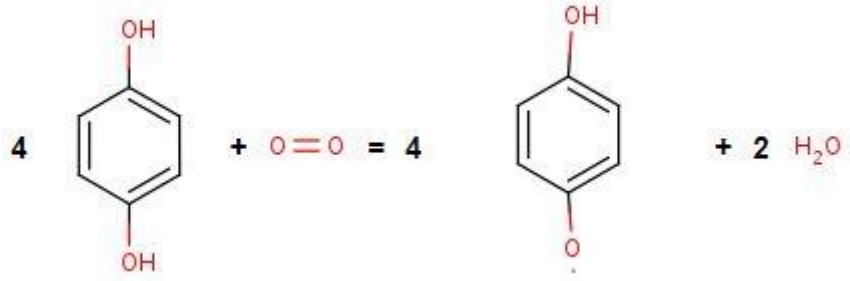
Laccase F

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.

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: > 2 000 U/ g
(Substrate: ABTS)

Specific activity: > 50 U/ mg Protein

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Parameter:	pH	Optimum: 4.0 – 4.5, effective in the range of pH 2.5 - 6.5
	Temperature	Optimum: 55°C, effective in the range of 20 - 70°C
Article-no.:	2035	
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

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