

Appendix II: Enzymes on Annex 1 of Dir. 67/548/EEC and Annex VI of EC Regulation No 1272/2008

Enzyme	CAS no.	EINECS No	Present EU classification (Annex I) Directive 67/548/EEC,		Danger Symbol	CLP classification (Annex VI)			Signal word
			R-phrase	S-Phrase		H-class/cat. code	Hazard statement	Pictogram	
Amylase, α -	9000-90-2	232-565-6	R42	S(2),S22,S24,S36/37	Xn	Resp. Sens. 1	H334	GHS08	Danger
Amylases with the exception of those specified elsewhere in this Annex	-----	-----	R42	S(2),S22,S24,S36/37	Xn	Resp. Sens. 1	H334	GHS08	Danger
Bromelain, juice	9001-00-7	232-572-4	R36/37/38,R42	S(2),S22,S24,S26,S36/37	Xn	Eye Irrit. 2 STOT* SE 3 Skin Irrit. 2 Resp. Sens. 1	H319 H335 H315 H334	GHS08 GHS07	Danger
Cellobiohydrolase, exo-	37329-65-0	253-465-9	R42	S(2),S22,S24,S36/37	Xn	Resp. Sens. 1	H334	GHS08	Danger
Cellulase	9012-54-8	232-734-4	R42	S(2),S22,S24,S36/37	Xn	Resp. Sens. 1	H334	GHS08	Danger
Cellulases with the exception of those specified elsewhere in this Annex	-----	-----	R42	S(2),S22,S24,S36/37	Xn	Resp. Sens. 1	H334	GHS08	Danger
Chymotrypsin	9004-07-3	232-671-2	R36/37/38,R42	S(2),S22,S24,S26,S36/37	Xn	Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 Resp. Sens. 1	H319 H335 H315 H334	GHS08 GHS07	Danger
Ficin	9001-33-6	232-599-1	R36/37/38,R42	S(2),S22,S24,S26,S36/37	Xn	Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 Resp. Sens. 1	H319 H335 H315 H334	GHS08 GHS07	Danger
Glucosidase, β -	9001-22-3	232-589-7	R42	S(2),S22,S24,S36/37	Xn	Resp. Sens. 1	H334	GHS08	Danger
Laccase	80498-15-3	420-150-4	R42	S(2), 23-45	Xn	Resp. Sens. 1	H334	GHS08	Danger



Papain	9001-73-4	232-627-2	R36/37/38,R42	S(2),S22,S24,S26,S36/37	Xn	Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 Resp. Sens. 1	H319 H335 H315 H334	GHS08 GHS07	Danger
Pepsin A	9001-75-6	232-629-3	R36/37/38,R42	S(2),S22,S24,S26,S36/37	Xn	Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 Resp. Sens. 1	H319 H335 H315 H334	GHS08 GHS07	Danger
Proteases with the exception of those specified elsewhere in this Annex	-----	-----	R36/37/38,R42	S(2),S22,S24,S26,S36/37	Xn	Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 Resp. Sens. 1	H319 H335 H315 H334	GHS08 GHS07	Danger
Proteinase, microbial neutral	9068-59-1	232-966-6	R36/37/38,R42	S(2),S22,S24,S26,S36/37	Xn	Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 Resp. Sens. 1	H319 H335 H315 H334	GHS08 GHS07	Danger
Rennin	9001-98-3	232-645-0	R36/37/38,R42	S(2),S22,S24,S26,S36/37	Xn	Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 Resp. Sens. 1	H319 H335 H315 H334	GHS08 GHS07	Danger
Subtilisin	9014-01-1	232-752-2	R37/38,R41,R42	S(2),S22,S24,S26,S36/37/39	Xn	STOT SE 3 Skin Irrit. 2 Eye Dam. 1 Resp. Sens. 1	H335 H315 H318 H334	GHS08 GHS05 GHS07	Danger
Trypsin	9002-07-7	232-650-8	R36/37/38,R42	S(2),S22,S24,S26,S36/37	Xn	Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 Resp. Sens. 1	H319 H335 H315 H334	GHS08 GHS07	Danger

*STOT = Specific Target Organ Toxicity