CLAIMS

1. A PROCESS FOR PRODUCING AN ANIMAL PROTEIN HYDROLYSATE comprising the following steps:

(a) subjecting raw material, particularly from a meat source, previously collected and then stored at a temperature range between 0℃ to 10℃, to the pasteurization process, by means of a thread system with controlled temperatures of about 65℃ to 85℃ and speeds around 10 rpm to 25 rpm also comprising the addition of a quantity of about 10% to 20% of water volume in the proportion 1:1;

(b) performing an enzymatic digestion with proteolytic enzymes proportions of 1.5:3,000 to 3.0:3,000 (enzyme:raw material) for about 1 to 2 hours, at temperatures of about 53℃ to 72℃.;

(c) filtering the resulting mixture of enzymatic digestion;

(d) correcting pH of broth to a range of 5.4 to 5.6 with the addition of acid and incorporation of an antifoaming agent of about 0.01% to 0.05% under agitation and temperature from 85℃ to 95℃;

(e) performing an initial centrifugation to separate the liquid and solid phases, followed by flotation with aeration and/ or a second centrifugation after the disposal of the solid phase;

(f) concentrating broth upon controlled temperature from about 80℃ to 95℃, vacuum and 25 to 35 ºBrix;

(g) performing acid hydrolysis with addition of approximately 25% to 50% of hydrochloric acid (HCl) and maintained for 15-30 minutes under temperatures of 95℃ to 125℃, and the neutralization with potassium hydroxide (KOH) until a pH of 6-7 is obtained;

(h) cooling protein hydrolysate, optionally with the correction of °Brix with the potassium hydroxide (KCl) that was internally generated by the process itself; and (i) processing mixture and dry the protein hydrolysate.

2. PROCESS, according to claim 1, characterized by the fact that the thread system comprises 4 threads operating at controlled speed from 20% to 90% using an inverter of system frequency, notably through a jacketed worn thread system, allowing the injection of vapor.

3. PROCESS, according to claim 1, characterized by the fact that the step (b) of enzymatic digestion is performed in digesters and jacketed stainless steel tanks

4. PROCESS, according to claim 1, characterized by the fact that the filtration step (c) is made with static, rotary sieves and percolator.

5. PROCESS, according to claim 1, characterized by the fact that the broth obtained in step (d) is agitated at approximately 25 to 35 rpm.

6. PROCESS, according to claim 1, characterized by the fact that the acid is preferably the phosphoric acid 85%.

7. PROCESS, according to claim 1, characterized by the fact that the antifoaming agent particularly comprises a dimethylsiloxane emulsion.

8. PROCESS, according to claim 1, characterized by the fact that the broth in step (e) is initially centrifuged in a decanter to separate the liquid phase, and after the disposal of solids, the liquid phase is stored in stainless steel tanks.

9. PROCESS, according to claim 8, characterized by the fact that step (e) additionally comprises a flotation process or second centrifugation for the separation of fat and lees.

10. PROCESS, according to claim 9, characterized by the fact that the flotation process is performed for about 10-25 minutes, with aeration by injection of microbubbles with pressure of 5 to 10 bar.

11. PROCESS, according to claim 10, characterized by the fact that the injection of microbubbles is performed using a cavitation pump with speeds of 1,600 L/h to 3,000 L/h.

12. PROCESS, according to claim 1, characterized by the fact that the concentrated broth of (g) is then transferred to a vitrified reactor with the internal pressure of 1.2 to 2.5 bar.

13. PROCESS, according to claim 1, characterized by the fact that the broth of (g) is also neutralized by adding a base, preferably potassium hydroxide (KOH) in quantities of about 22% to 44%, maintaining the broth for approximately 10 to 25 minutes.

14. PROCESS, according to claim 1, characterized by the fact that the cooling down in step (h) comprises the decrease of temperature of broth to a temperature of about 75°C to 90°C.

15. PROCESS, according to claim 14, characterized by the fact that the step (h) comprises optionally the adjustment of °Brix to less than 25 with the addition of the potassium chlorine (KCl) which is generated in the step (g) of neutralization.

16. PROCESS, according to claim 1, characterized by the fact that the mixing step (i) of the process using, preferably a shaft paddle mixer.

17. PROCESS, according to claim 16, characterized by the fact that the step (i) still comprises the step of spray drying through the addition of dextrin and

anti-humectants to the liquid resulting from the hydrolysis and further mixed for about 20 minutes with agitation.

18. PROCESS, according to claims 16 or 17, characterized by the fact that step (i) still comprises the delivery of the mixture to a dryer with approximately temperatures of 80℃ to 99℃.

19. ANIMAL PROTEIN HYDROLYSATES, obtained by the process described in any one of claims 1 to 18, characterized by the fact that it has a protein content of about 14% to 18%, a humidity content that is less than or equal to 2% and a fat content that is less than or equal to 1%.

20. ANIMAL PROTEIN HYDROLYSATES, according to claim 19, characterized by the fact that it has a potassium content that is about 28% to 35%.

21. ANIMAL PROTEIN HYDROLYSATES, according to claim 19 or 20, characterized by the fact that it has a final pH of 6.0 to 7.0.

22. USES OF ANIMAL PROTEIN HYDROLYSATES, as defined in any one of the claims 19 to 21, characterized by its use as condiments, seasoning and/or powder meat flavors, particularly in the production of meat products or products in the form of sachet.

23. USES, according to claim 22, characterized by the fact that it additionally comprises a replacer of the table salt and/ or decrease sodium content.