

TECHNICAL SHEET		Product code: 2773/C
Company address: IRA Istituto Ricerche Applicate Via del Lavoro, 4a/6 20865 Usmate -Venate (MB) Tel 039 / 631741 Fax 039 / 6755409	Product: PHYTODERMINA C	
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PRODUCT IDENTIFICATION

Chemical name	Amino acids titrated hydro-glycolic solution of plant origin.			
USA INCI name	Propylene Glycol, Water, Hydrolyzed Soy Protein			
EU INCI name	CAS	EINECS	Japan MHW code	% Composition
Propylene Glycol	57-55-6	200-338-0	002328 Propylene Glycol	B
Aqua	7732-18-5	231-791-2	001341 Water	B
Hydrolyzed Soy Protein	68607-88-5	271-770-5	0800100 Hydrolyzed Soy Protein	E
Note: In order to guarantee the physico-chemical and microbiological stability of the product, 10 % of IRACIDE (INCI name: Propylene Glycol Sodium Methylparaben SodiumDehydroacetate Sorbic Acid Tetrasodium EDTA) and 0.2% of IRAPRES F (INCI Name: Phenoxyethanol, Propylene glycol, Methylparaben, Ethylparaben, Propylparaben) are added at the end of the working process.				

CHEMICO-PHYSICAL CHARACTERISTICS

PARAMETERS	STANDARD VALUES	METHODS	INTERNAL REF.
Physical aspect	Liquid	Visual	
Gardner colour index	3 - 6	Colorimetric	CH067
Smell	Characteristic	Olfactory	
pH	6.4 – 7.8	Potentiometric	CH001
Refractive index	1.2995 – 1.4995	Refractometric	CH005
Hydroxyproline content	620 mg/L		
Dry residue	≥ 1 %	Thermogravimetric balance, 150 °C for 60 min.	CH003
Solubility in: Water Vegetable oils Mineral oils	Soluble Insoluble Insoluble	Chemico-physical	
Total nitrogen	≥ 1.4 g/L	CHNS	CH053
Heavy metals	< 20 ppm	Atomic absorption	
Arsenic	< 1 ppm	Atomic absorption	
Pesticides	Absent		
Technical note: To eliminate any precipitate and suspended particle, at working end the extract is subjected to a two steps filtration by monomembrane filters, the first one of 5 relative microns and the second of 0.2 absolute microns. After about two weeks the product is filtered again through a 0.2 absolute microns filter to eliminate further suspended particles naturally forming in herbal extracts.			

ORIGIN

PHYTODERMINE C is produced using hydrolyzed soy proteins only.

AMINO ACIDS PROFILE	mg / L
ASPARTIC ACID	1035
GLUTAMMIC ACID	1320
ALANINE	1230
ARGININE	1035
GLYCINE	2880
HYDROXYPROLINE	1500
	Note: added at the end of the working process
ISOLEUCINE	240
HYSTIDINE	135
LEUCINE	420
LYSINE	630
PROLINE	1635
SERINE	375
TYROSINE	75
THREONINE	255
VALINE	495

MICROBIOLOGICAL CHARACTERISTICS

PARAMETERS	STANDARD VALUES	INTERNAL REF.
TVC	< 100 U.F.C./ml	MB001/FU
Yeasts and Fungi	< 50 U.F.C./ml	MB010
<i>Pseudomonas aeruginosa</i> :	absent	MB003
<i>Staphylococcus aureus</i>	absent	MB004
<i>Candida albicans</i>	absent	MB005

TOXICOLOGICAL INFORMATION

Primary cutaneous irritation in humans (Dose: Pure product)	Not irritant (Draize Patch Test on 20 subjects)
Cytotoxicity <i>in vitro</i> (Dose: 10 %)	Not toxic (Test on human endothelial cells Caco – 2)

STORAGE

Storage in the well sealed original container, in a dry and dark place is recommended. The shelf life is 1 year for the product stored in conformity with the suggested conditions.

PRODUCT ACTIVITY

The results of the following tests are available:

- Skin reinforcing activity (on cell cultures)
- Antielastase activity (on cell cultures)
- Revitalizing activity (on cell cultures)
- Revitalizing activity comparative test against products of animal origin (oxygen consumption)
- Stability to temperature, pH, alcohol (ethanol)

PRODUCT APPLICATION INFORMATION

Film forming, moisturizing and revitalizing. PHYTODERMINE C effectively substitutes for all products of animal origin endowed of moisturizing effect (collagen, elastin, etc.) or stimulant and revitalizing (placent, bone marrow, organ extracts, etc.). Moreover, thanks to the considerable amino acids content, among which hydroxyproline (added at the end of the working process), fundamental for glycoproteins, it is able to carry out an excellent function as N.M.F (Normal Moisturizing Factor). Recommended for all moisturizing and revitalizing products at the dose level of 2 – 5 % and for shampoos and trichological vials at a dose level variable from 0.5 to 10 %.

LEGEND

- A** : Higher than 50%
B : Between 25% and 50%
C : Between 10% and 24,9%
D : Between 5% and 9,9%
E : Between 1% and 4,9%
F : Between 0,1% and 0,9%
G : Lower than 0,1%
INCI : International Nomenclature Cosmetic Ingredient
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS : Chemical Abstract Service
MHW : Ministry of Health and Welfare
JSCI : Japanese Standard of Cosmetic Ingredient