MESOBRIGHT VIT C

ACTIVES:

<u>Highly absorbable ionisable vitamin</u> C (or TRISODIUM ASCORBYL PALMITATE PHOSPHATE): at least 20.000ppm (exact concentration in KNOW-HOW) of the trisodium ascorbyl palmitate phosphate in the BRIGHTENING EFFECT CONCENTRATE with highly absorbable Vit. C.

<u>Ionisable vitamin C</u> ((or TRISODIUM ASCORBYL PALMITATE PHOSPHATE): at least 30.000ppm (exact concentration in KNOW-HOW) of the sodium ascorbyl phosphate in the BRIGHTENING EFFECT CONCENTRATE with highly absorbable Vit.C.

MAIN PURPOSE:

<u>Highly absorbable ionisable vitamin</u> C: "Lightens melanin in the melanocytes and the lower layers of the epidermis."

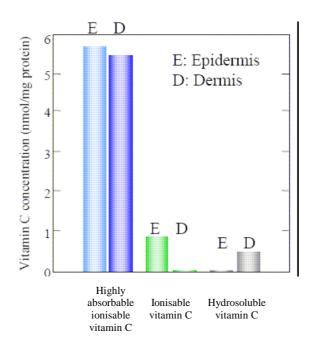
<u>Ionisable vitamin</u> C: "Lightens melanin that has been transferred to corneocytes and upper layers of the epidermis."

SECONDARY PURPOSE:

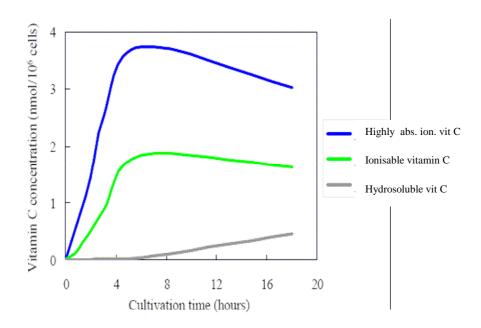
"To stimulate collagen synthesis, activating natural defences and strengthening skin firmness"

RESULTS:

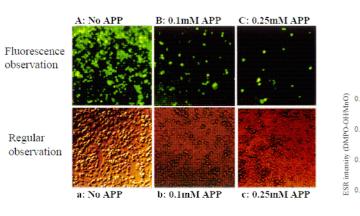
1-Ex vivo: Penetration of different hydrosoluble vitamin C derivatives on the skin explants: increases by 5 comparing with any other derivative (at same concentration).

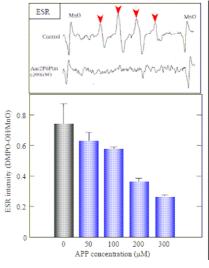


2-Ex vivo: Cellular bioavailability of different hydrosoluble vitamin C derivatives on the skin explants: increases by 2 to 10 comparing with any other derivative (at same concentration).

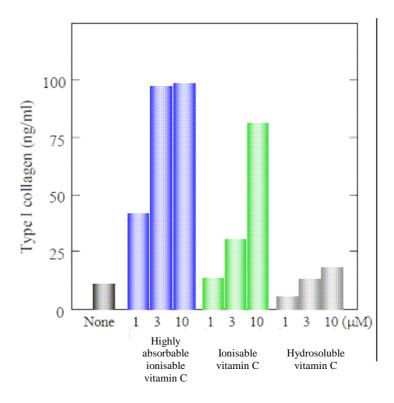


3- In-vitro: Strong capability of the APP (Highly absorbable ionisable vitamin C) to scavenging intracellular free radicals on human fibrosarcoma, treated with H_2O_2 and Cu^{2+} : Reduction of fluorescence and ESR values dose-dependency.

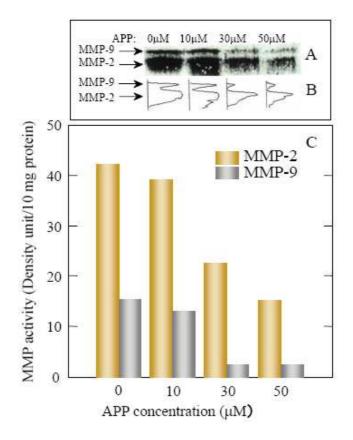




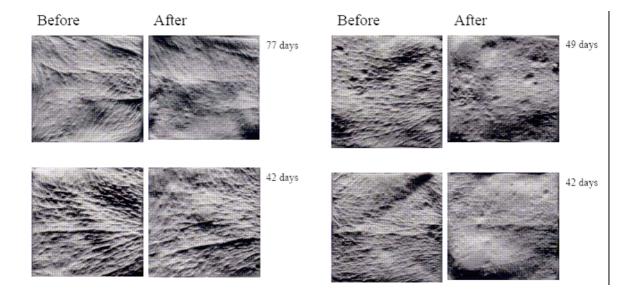
4- In-vitro: Enhancement of collagen I synthesis on human fibroblast after 72hours contact of the different water-soluble vitamin C derivatives.



5- In-vitro: Inhibition of collagen degradation of APP (Highly absorbable ionisable vitamin C) by blocking the MMP activity on human fibrosarcoma after 18hours contact.



5- In-vivo: Clinical anti-wrinkle study performed on 21 volunters by using a lotion containing 10.000ppm of Highly absorbable ionisable vitamin C, twice a day for 1-3months.



<u>Acid amino-ethylphosphinic</u> (or AMINOETHYLPHOSPHINIC ACID): at least 10.000ppm (exact concentration in KNOW-HOW) of the aminoethylphosphinic acid in the BRIGHTENING EFFECT CONCENTRATE with highly absorbable Vit.C.

MAIN PURPOSE:

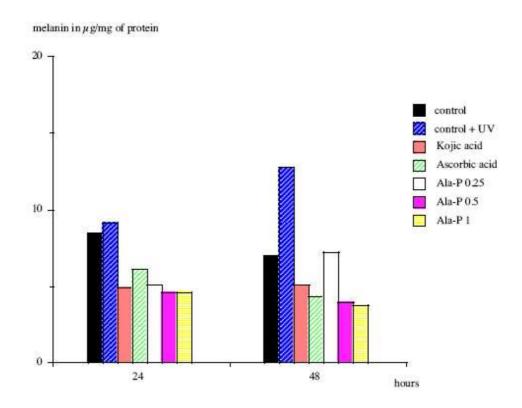
"To inhibit the synthesis of new melanin, delaying the re-apparition of previously lightened dark spots."

SECONDARY PURPOSE:

"To promote the lightening action of the vitamin C derivatives."

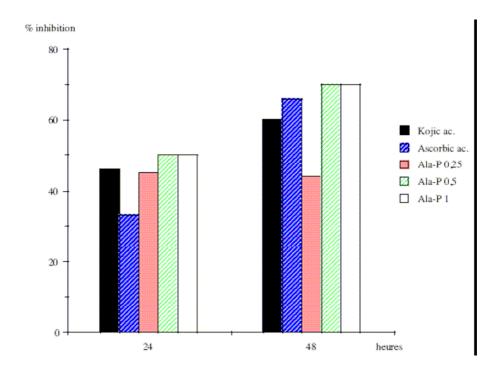
RESULTS:

1-In vitro: Effect of 1-aminoethylphosphinic acid (Ala-P) on the melanin content of S91 cells vs. time and at different concentrations (100, 200 & 400ppm). The cells are irradiated and then treated by one of the actives (Kojic 460ppm, Ascorbic 60ppm). Results: Aminoethylphosphinic acid has a comparable depigmentant efficacy as the standard whitening actives, even a low concentrations.



2-In vitro: Melanogenesis inhibiting activity of of 1-aminoethylphosphinic acid (Ala-P) on the melanin content of S91 cells vs. time and at different concentrations (100, 200 & 400ppm). The cells are irradiated and then treated by one of the actives (Kojic 460ppm, Ascorbic 60ppm).

Results: Aminoethylphosphinic acid has a comparable bleaching efficacy as the standard whitening actives, even a low concentrations.



3-In vitro: Melanogenesis inhibiting activity of 1-aminoethylphosphinic acid (Ala-P) on the melanin content of S91 cells (control cell, A). The cells are irradiated (B) and then treated by aminoethylphosphinic acid (80ppm, C).

Results: Sensible reduction of the melanin content into irradiated melanocytes.

