

INSTITUT KUHLMANN GmbH
Hedwig-Laudien-Ring 3, 67071 Ludwigshafen

Telefon: 0621-669449-0

Telefax: 0621-669449-99

Kostdoktor Sverige AB
Attn. Mrs. XXX
Järnvägsgatan 11

e-Mail / Internet:

labor@institut-kuhlmann.de

www.institut-kuhlmann.de

65225 Karlstad
Sweden

Ihr Zeichen

Ihr Schreiben vom

Unser Zeichen

Datum

XXX

Dr. Ku/Fr

25.06.2012

ANALYSIS REPORT No. 5-2970/12-1 through -5

Page 1/3

Ref.: Determination of Vitamin D₃

Sample(s) received: May 29th, 2012

Sample description:

- No. 1 One original package with the declaration among other things: "Pharma Nord. D-Pearls® D-vitamin - högdoserat. 120 kapslar. Nettovikt: 22 g. Bäst före utgången av: 09 2014. Batch nr.: 1103411. Pharma Nord ApS, Tinglykke 4-6, 6500 Vojens, Danmark."
- No. 2 One original package with the declaration among other things: "Bättre Hälsa. VITAMIN D 50 mcg 2000 IE. 100 VEG. KAPSLAR. 02-2014-12091. Bättre Hälsa AB, Stockholm."
- No. 3 One original package with the declaration among other things: "Holistic. D₃-vitamin 50 µg (2000 IE). 90 kapslar. Bäst före utgången av / Batchnr: 03-2014-12101. Holistic Sverige AB."
- No. 4 One original package with the declaration among other things: "PURE PHARMA. VITAMIN D₃ CUSTOMIZED DOSE™ 2500 / 5000 IU. 120 Capsules. Batch no.: 019428. Best before: 24-02-2015. PUREPHARMA."
- No. 5 One original package with the declaration among other things: "SELF OMNINUTRITION. VITAMIN D FORTE 5000 IU. 100 TABLETTER. LOT NR / BÄST FÖRE: 06060305, BF. 03/2014. 13:e Protein Import AB."

Time range of analysis: 29.05.2012 – 21.06.2012

No. 1

Appearance colourless, round capsules, diameter 8 mm

Content of the capsules yellowish oil

Declaration

Vitamin D ₃	µg/capsule	18.7	20
------------------------	------------	------	----

No. 2

Appearance colourless, oblong capsules, length 22 mm

Content of the capsules fine, white powder

Declaration

Vitamin D ₃	µg/capsule	54	50
------------------------	------------	----	----

No. 3

Appearance colourless, oblong capsules, length 21 mm

Content of the capsules fine, white powder

Declaration

Vitamin D ₃	µg/capsule	49	50
------------------------	------------	----	----

No. 4

Appearance brown, oblong capsules, length 10 mm

Content of the capsules yellowish oil

Declaration

Vitamin D ₃	IU/capsule	2900	2500
------------------------	------------	------	------

No. 5

Appearance white, round tablets,
diameter 10 mm

Average weight
(of 10 tablets) g 0.324

Declaration

Vitamin D₃ µg/tablet 148 125

Remarks

Vitamin D₃ in sample no. 1 was analysed after dilution of three capsules in NH₄-solution/ethanol and extraction with hexane by LC-MS.

Vitamin D₃ in samples no. 2 through 4 was analysed in one capsule after saponification by LC-MS (SOP VIT 14a).

Vitamin D₃ in sample no. 5 was analysed in a pooled sample of ten tablets after saponification by LC-MS (SOP VIT 14a).

INSTITUT KUHLMANN GmbH
Analytik-Zentrum Ludwigshafen

Dörte Gräßer
(food chemist)

Susanne Frenzel
(food chemist)