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27.04.2012 Date:

Expertise

Examination of the Product

"Handreiniger - Nr. 17-0006-K"

Concentration: 10,0% in water

by Human Patch Test (Cosmetic Trial)

Sponsor

Harlan Laboratories Ltd.

Zelgliweg 1 4452 Itingen Switzerland

Performing Laboratory

Derma Consult GmbH

Brunnenstr. 61 53347 Alfter Germany

Study Details

Determination of irritating effects to the skin with an occlusive patch test. *Type of study....:*

April 2012 Study Period:

Study Director: Dr. med. H. Prieur

Test subjects: 50 (24-69 years; sex distribution non-standardized)

25 normal healthy, 4 eczema, 3 allergy and 18 subjects with sensitive skin

Test site..... Back

Concentration....: 10,0% in water

Controls...... SDS (1% in water), water

Summary Results

All participants completed the study. Under the test conditions, SDS (1% in water) caused positive reactions in 12 subjects. The negative control water showed no reactions. None of the subjects showed any reaction to the test product. On the basis of the test results and under the test conditions, the product

"Handreiniger - Nr. 17-0006-K"

is to be classified as 'harmless' as regards the possibility of skin irritation.

Signature:

Dr. med. H. Prieur Dermatologist - Allergist

Signature:

Dr. Jana Nissen Pharmacist

Page 1 of 3

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Methodology

Introduction

The epicutaneous patch test allows us to assess the primary skin irritation potential of cosmetic-finished products and raw materials.

Description

All the work described in this expertise was conducted in accordance with the guidelines by COLIPA (Walker A.P. et al: Test Guidelines for Assessment of Skin Compatibility of Cosmetic Finished Products in Man. Food and Chemical Toxicology 34, 1996, 651-660). Because it was a study with humans, it was carried out in accordance with the Declaration of Helsinki (1964) and subsequent revisions.

Experiments were carried out on 50 volunteers (25 normal healthy subjects, 4 eczema patients, 3 allergy patients, 18 subjects with sensitive skin) between the ages of 24 to 69. Sex distribution was not standardized. The volunteers were clearly informed, verbally and in writing, regarding the nature of the study, the timetable, constraints and possible risks. They gave their written informed consent before participating in the study.

Participants could withdraw from the study at any time without giving reason. During the test period, the subjects refrained from using other substances on the test areas.

Inclusion criteria

- · informed volunteers
- age ≥ 18 years

Exclusion criteria

- pregnant or lactating women
- blemishes or marks (tattoos, sunburn) which interfere with scoring
- any skin disease that may interfere with the aim of the study

Procedure

The product was applied in a concentration as outlined above in square test-chambers (Haye's Test Chambers - Haye's Service B.V., The Netherlands) to the backs of the panellists for a period of 48 hours. Proper adherence of the test patches was assured by the inclusion of sodium dodecyl sulphate (SDS) in one concentration (1%) as positive control. Water was used as a negative control.

The treatment sites were assessed for the presence of irritation by a trained evaluator using a 5 point visual scoring scale at 48 h (30 min after patch removal) and 72 h after patch application.

Scoring scale

Erythema 0: no E., 1: slight E., 2: significant E., 3: pronounced E., 4: strong E.

Fissure 0: no F., 1: minimal F., 2: significantly perceptible F., 3: pronounced F., 4: ulceration

Scaling 0: no Sc., 1: minimal Sc., 2: moderate Sc., 3: significant Sc., 4: closed scale crust

Results

The test results outlining the data for erythema, scaling and fissure formation on a per subject base for the test product are attached in tabulated form.

Literature

Jan E. Wahlberg, Magnus Lindberg:
"Patch Testing" in
P.J. Frosch, T. Menné & J.-P. Lepoittevin (eds.),
Contact Dermatitis 4th Edition
Springer-Verlag, Berlin Heidelberg, Germany (2006), pp. 365-390

Appendix: test protocol

26.04.2012 PROTOCOL

Product: Handreiniger - Nr. 17-0006-K

No.	Туре	after 48 h			after 72 h		
1.17	,,,,	Е	F	S	Е	F	S
1	S	0	0	0	0	0	0
2	S	0	0	0	0	0	0
3		0	0	0	0	0	0
4		0	0	0	0	0	0
5	S	0	0	0	0	0	0
6		0	0	0	0	0	0
7	E	0	0	0	0	0	0
8		0	0	0	0	0	0
9	Α	0	0	0	0	0	0
10	S	0.	0	0	0	0	0
11		0	0	0	0	0	0
12	S	0	0	0	0	0	0
13	S	0	0	0	0	0	0
14	S	0	0	0	0	0	0
15		0	0	0	0	0	0
16	S	0	0	0	0	0	0
17		0	0	0	0	0	0
18	А	0	0	0	0	0	0
19		0	0	0	0	0	0
20		0	0	0	0	0	0
21	S	0	0	0	0	0	0
22		0	0	0	0	0	0
23		0	0	0	0	0	0
24	S	0	0	0	0	0	0
25		0	0	0	0	0	0
26	Е	0	0	0	0	0	0
27		0	0	0	0	0	0
28		0	0	0	0	0	0
29		0	0	0	0	0	0
30	S	0	0	0	0	0	0
31	A	0	0	0	0	0	0
32		0	0	0	0	0	0
33	S	0	0	0	0	0	0
34		0	0	0	0	0	0
35	S	0	0	0	0	0	0
36	S	0	0	0	0	0	0
37		0	0	0	0	0	0
38		0	0	0	0	0	0
39	S	0	0	0	0	0	0
40		0	0	0	0	0	0
41	Е	0	0	0	0	0	0
42		0	0	0	0	0	0
43	S	0	0	0	0	0	0
44		0	0	0	0	0	0
45		0	0	0	0	0	0
46	S	0	0	0	0	0	0
47	E	0	0	0	0	0	0
48		0	0	0	0	0	0
49	S	0	0	0	0	0	0
50		0	0	0	0	0	0
SUI	\/I	0,0	0,0	0,0	0,0	0,0	0,0
301	VI	0,0	0,0	1 0,0	0,0	0,0	0,0

Erythema (E): no E.: 0, slight E.: 1, clear E.: 2, severe E.: 3, very severe E.: 4
Fissures (F): no F.: 0, minimal F.: 1, clearly visible F.: 2, distinct F.: 3, ulceration: 4
Scales (S): no S.: 0, minimal S.: 1, clearly visible S.: 2, moderate S.: 3, distinct S.: 4

S: subjects with sensitive skin E: patients with eczema A: patients with allergy

26.04.2012 PROTOCOL

Product: SDS (1% in water)

No.	Туре	after 48 h			after 72 h			
0.000	,,,,,	E	F	S	E	F	S	
1	S	0	0	0	0	0	0	
2	S	1	0	0	1	0	0	
3		0	0	0	0	0	0	
4		0	0	0	0	0	0	
5	S	1	0	0	1	0	0	
6	Ť	0	0	0	0	0	0	
7	E	0	0	0	0	0	0	
8	 	0	0	0	0	0	0	
9	Α	0	0	0	0	0	0	
10	S	0	0	0	0	0	0	
11	 	0	0	0	0	0	0	
12	S	0	0	0	0	0	0	
13	S	0	0	0	0	0	0	
14	Š	1	0	0	0	0	0	
15	+-	0	0	0	0	0	0	
16	S	0	0	0	0	0	0	
17	-	0	0	0	1	0	0	
18	A	1	0	1	1	0	1	
19	+ '`	Ö	0	0	0	0	0	
20	1	0	0	0	0	0	0	
21	S	0	0	0	0	0	0	
22	+ 3	0	0	0	0	0	0	
23	+	0	0	0	0	0	0	
24	S	0	0	0	0	0	0	
25	3	0	0	0	0	0	0	
26	E	1	0	1	1	0	1	
27		0	0	0	0	0	0	
	_	0	0	0	0	0	0	
28	_	0	0	0	0	0	0	
29	-	1	0	0	0	0	0	
30	S	0	0	0	0	0	0	
31	Α		0	0	0	0	0	
32	-	0	0	0	0	0	0	
33	S	0	0	0	1	0	0	
34	-	0	0	0	Ö	0	0	
35	S	0	0	0	0	0	0	
36	10			0	0	0	0	
37		0	0	0	0	0	0	
38	-	1	0	0	0	0	0	
39	S		0	0	0	0	ō	
40	+	0	0	1	1	0	1	
41	E		0	0	0	0	Ö	
42		0		0	0	0	0	
43	S	0	0		0	0	0	
44	-	0	0	0	0	0	0	
45	+ ~	0	0	0		0	0	
46	S	0	0	0	0		0	
47	E	1	0	0		0	0	
48		0	0	0	0	0	0	
49	S	1	0	0	0	0	0	
50		0	0	0			and the same of th	
SUM		0,2	0,0	0,06	0,16	0,0	0,06	

Erythema (E): no E.: 0, slight E.: 1, clear E.: 2, severe E.: 3, very severe E.: 4
Fissures (F): no F.: 0, minimal F.: 1, clearly visible F.: 2, distinct F.: 3, ulceration: 4
Scales (S): no S.: 0, minimal S.: 1, clearly visible S.: 2, moderate S.: 3, distinct S.: 4

S: subjects with sensitive skin E: patients with eczema A: patients with allergy

26.04.2012 PROTOCOL

Product: Water

No.	Туре	after 48 h			after 72 h			
145		Е	F	S	E	F	S	
1	S	0	0	0	0	0	0	
2	S	0	0	0	0	0	0	
3		0	0	0	0	0	0	
4		0	0	0	0	0	0	
5	S	0	0	0	0	0	0	
6		0	0	0	0	0	0	
7	Е	0	0	0	0	0	0	
8		0	0	0	0	0	0	
9	Α	0	0	0	0	0	0	
10	S	0	0	0	0	0	0	
11		0	0	0	0	0	0	
12	S	0	0	0	0	0	0	
13	S	0	0	0	0	0	0	
14	S	0	0	0	ō	0	0	
15		0	0	0	0	0	ō	
16	S	0	0	0	0	0	0	
17		0	0	0	0	0	0	
18	A	0	0	0	0	0	0	
19		0	0	0	0	0	0	
20		0	0	0	0	0	0	
21	S	0	0	0	0	0	0	
22	3	-	0	0	0	0	0	
	_	0	0	0	0	0	0	
23	-		0	0	0	0	0	
24	S	0		0	0	0	0	
25	-	0	0	0	0	0	0	
26	Е	0	0		0	0	0	
27		0	0	0			0	
28		0	0	0	0	0	0	
29		0	0	0	0	0	0	
30	S	0	0	0	0	0		
31	Α	0	0	0	0	0	0	
32		0	0	0	0	0	0	
33	S	0	0	0	0	0	0	
34		0	0	0	0	0	0	
35	S	0	0	0	0	0	0	
36	S	0	0	0	0	0	0	
37		0	0	0	0	0	0	
38		0	0	0	0	0	0	
39	S	0	0	0	0	0	0	
40		0	0	0	0	0	0	
41	Е	0	0	0	0	0	0	
42		0	0	0	0	0	0	
43	S	0	0	0	0	0	0	
44		0	0	0	0	0	0	
45		0	0	0	0	0	0	
46	S	0	0	0	0	0	0	
47	E	0	0	0	0	0	0	
48		0	0	0	0	0	0	
49	S	0	0	0	0	0	0	
50		0	0	0	0	0	0	
SUM		0,0	0,0	0,0	0,0	0,0	0,0	

Erythema (E): no E.: 0, slight E.: 1, clear E.: 2, severe E.: 3, very severe E.: 4
Fissures (F): no F.: 0, minimal F.: 1, clearly visible F.: 2, distinct F.: 3, ulceration: 4
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