Test Report

Client Name :	Industrial Technology Research Institute, Material and Chemical Research Laboratories	**Number :**	SEP20016001
Address :	No.321, Sec. 2, Guangfu Rd., East Dist., Hsinchu City 300, Taiwan (R.O.C.)		
Item Name :	100 ppm & 900 ppm	**Date Issued :**	OCT 05 2016
Date Received :	SEP 20 2016		
Experiment Date :	SEP 23 2016		
Sample Package :	Bulk		

Test Item : Acute Dermal Irritation/Corrosion

Experimental Animal : NZW Rabbit

Housing and feeding conditions :

Albino Rabbits are individually housed. The temperature of the experimental animal room is 20 degrees Celsius for rabbits. In addition, the relative humidity is 30% to 70%. Lighting sequence is 12 hours light, 12 hours dark. For feeding, conventional laboratory diets are used with an unrestricted supply of drinking water.

Dosage :

Doses of 0.5 mL chemical solution (100 ppm and 900 ppm) are applied to the test site. The negative control is 0.5 mL RO water.

Procedure :

1. Twenty-four hours before the test, the fur covering the dorsal area was clipped carefully.
2. On the day of test, the body weight was recorded as the start stage.
3. The healthy skin of rabbits were covered with a gauze patch which containing chemical solution in an area approximately 6 cm^2, holding in place with permeable plastic surgical adhesive tape.
4. After Exposing 4 hours to the test chemical, the patches were removed.
5. All rabbits were examined for erythema and odema. The responses were scored after 1, 24, 48 and 90 hours. Dermal reaction was evaluated and recorded according to the grades in the Table below.
6. If no any damage is identified on the skin after 90 hours, the rabbits will be observed until the day 14 to determine the irritation of skin.

Erythema and Eschar Formation

No erythema	0
Very slight erythema (barely perceptible)	1
Well defined erythema	2
Moderate to severe erythema	3
Severe erythema (beef redness) to eschar formation preventing grading of erythema	4

Maximum possible: 4

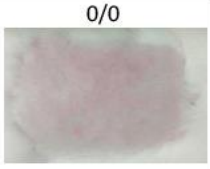
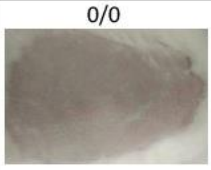
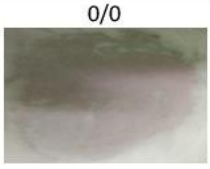
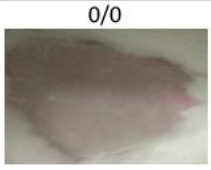
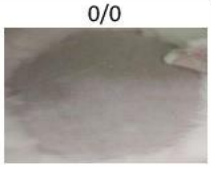
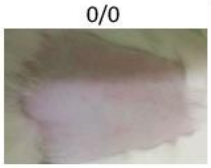
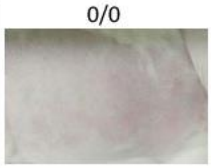
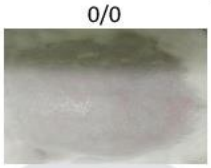
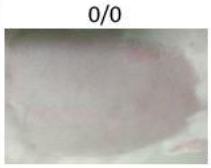
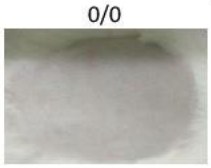
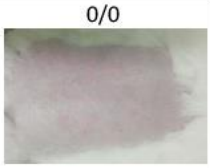
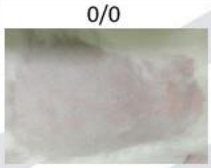
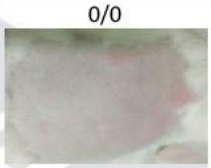
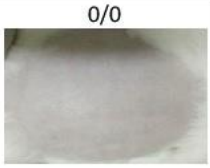
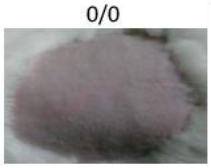
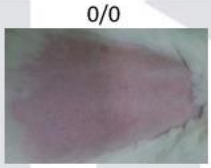
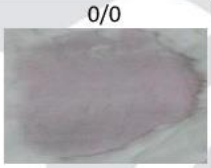
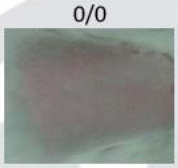
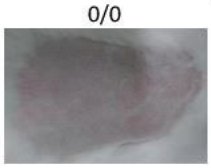
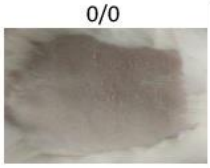
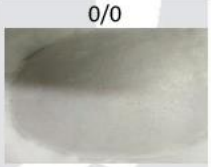
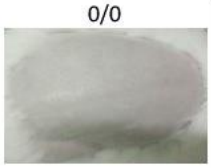
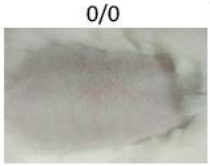
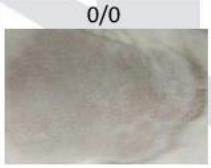
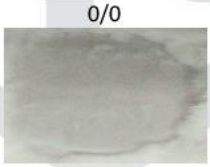
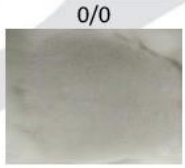
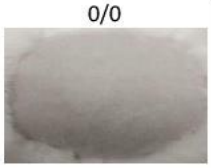
Oedema Formation

No oedema	0
Very slight oedema (barely perceptible)	1
Slight oedema (edges of area well defined by definite raising)	2
Moderate oedema (raised approximately 1 mm)	3
Severe oedema (raised more than 1 mm and extending beyond area of exposure)	4

Maximum possible: 4

Results :

Irritation/corrosion response scores and the photograph record:

	A1	A2	A3	A4	A5
	Control	100 ppm	900 ppm	Control	100 ppm
0 hr	0/0 	0/0 	0/0 	0/0 	0/0 
1 hr	0/0 	0/0 	0/0 	0/0 	0/0 
24 hrs	0/0 	0/0 	0/0 	0/0 	0/0 
48 hrs	0/0 	0/0 	0/0 	0/0 	0/0 
90 hrs	0/0 	0/0 	0/0 	0/0 	0/0 
114 hrs	0/0 	0/0 	0/0 	0/0 	0/0 
Weight	Start: 1.82 kg End: 2.01 kg	Start: 1.78 kg End: 2.01 kg	Start: 1.62 kg End:1.86 kg	Start: 1.80 kg End:2.00 kg	Start: 1.74 kg End:1.92 kg

Conclusions :

The chemical solution seems not obviously irritate the skin of rabbits among 100 ppm and 900 ppm, and no abnormal clinical response is observed. According to preliminary results, the observations will continue until the day 14 to insure no irritation of skin.

Reference :

OECD guideline for testing of chemicals (2015) Acute Dermal Irritation/Corrosion

實驗執行人： Jian-Han Chen, Han-Huei Lin

*Above properties are typical values and should not be used for writing specifications. It's essential that the user should evaluate the product for a period of time to determine whether it is fit for a particular purpose and applications.

本測試結果僅對該檢驗之檢體負責，非經本實驗室特別許可，不得分段轉載本檢驗報告結果。