

## ABSENCE OF NICKEL IN DETERGENTS CONFIRMED BY DIMETHYLGLYOXIME SPOT TEST

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Reports differ greatly as to the significance of nickel in detergents as a cause of dermatitis. Dimethylglyoxime spot test was negative for nickel with various detergents. It seems therefore that nickel is not an important cause of detergent-induced dermatitis in India.

**Key words :** Dermatitis, Nickel, Dimethylglyoxime, Detergents.

Nickel present in detergents has been reported to cause dermatitis on the hands<sup>1,2</sup> but this has been refuted by others.<sup>3,4</sup> We have tested for the presence of nickel in some of the detergents commonly used in India, by the dimethylglyoxime (DMG) spot test.<sup>4</sup>

### Materials and Methods

DMG spot test for nickel was done with various detergent powders (Surf, Key, Vim, Biz, Nirma and Sunlight) and soaps (Rin, Det, Sunlight, Kasthuri, 501 and Laxmi). A few drops of 1% alcoholic solution of DMG, and a few drops of ammonia water were added to 5 ml of the detergent solution<sup>4</sup> which was prepared by adding 10 gm of detergent to 1000 ml of water. Tests were carried out at room temperature. The mixture was observed immediately, after 15 minutes and at the end of half hour for alteration in colour.

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### Results

Strawberry red coloration indicating the presence of nickel was not produced with any of the detergents.

### Comments

DMG spot test is an extremely sensitive method to detect nickel in various materials.<sup>4</sup> Negative spot test rules out the possibility of nickel as a cause of dermatitis, especially hand dermatitis due to the use of detergents in India.

### References

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