

# Health and Safety Executive OC 294/46

Field Operations Division

To

Factory Inspectors

FCG Specialist Inspectors (Occupational Hygiene)

Employment Medical Advisers

Employment Nursing Advisers

## HENNA HANDLING IN THE COSMETICS INDUSTRY

Information has become available relating to the use of henna materials in the cosmetics industry. Substantial numbers of employees at one company have become immunologically sensitised and some have developed occupational asthma from exposure to henna dust.

### Background

1 Henna is a generic name given to certain imported hair colouring agents of plant origin and a number of henna types have been identified. There appears to be considerable contamination of henna supplies with various plant materials. Problems have been found with exposure to Red henna (*Lawsonia inermis*), Egyptian henna (*Lawsonia inermis*) and Black henna (*Lawsonia inermis* and *Indigofera tinctoria*). Ricinus communis (castor bean), which has been found in some hennas, is also a well known respiratory sensitiser. Other henna types, Neutral henna (*Lawsonia alba*) and Sedra henna (*Acacia*) do not seem to convey the same properties. Henna is normally supplied in plastic lined hessian sacks of 50kg but the sack material is not thought to be implicated in the health problem.

2 As well as containing respiratory sensitisers, castor beans also contain ricin and significant quantities of this substance have been found in some henna samples. Ricin is an extremely acute toxic substance that can cause severe acute reactions at low doses and can be lethal. It therefore presents a considerable potential risk to employees.

### The risk

3 A number of people handling/processing henna have developed allergic respiratory symptoms of breathlessness and wheezing after relatively short periods of

exposure to the dust.

4 Knowledge of the sensitisation potential of henna is limited and consequently importers and suppliers have been unaware of the risk. HSW Act s.6 information is therefore unlikely to provide such information to users. However, the trade association (the Cosmetics, Toiletry and Perfumery Association) has been alerted by the Chemical Manufacturing NIG, Merseyside Area Office.

#### ACTION BY INSPECTORS

5 The requirements of the COSHH Regulations apply to exposure to henna. Where reasonably practicable, exposure should be prevented and importers/suppliers should seek castor bean-free supplies, if these are available. Additionally, inspectors should be wary of any claims that heat treating henna-containing materials to 100°C has destroyed its sensitising potential, as the success of this technique is unknown. However, such heat treatment will detoxify any ricin present.

6 Stringent procedures and practices should be adopted to ensure that exposure to henna dust is reduced to the lowest practicable level. Whilst the application of engineering control and other techniques should substantially reduce the dust levels, air-fed RPE is also recommended for employees handling henna. Health surveillance will also be necessary.

7 Inspectors should also be aware that workers in ancillary operations, HM Customs & Excise, irradiation and sterilising plant operators, as well as those in sub-contract packing, may also be at risk where there has been contact with henna.

8 Manufacturers and suppliers of henna-based products should be required to supply comprehensive HSW Act s.6 information to end-users of products such as hair colourings and shampoos, eg hairdressers.

## Further information

9 Further information on respiratory sensitisers is given in OM 1991/146 and HSE leaflet, *Respiratory sensitisers: guide to employers*, IND(G)95(L) (file 285).

28 October 1993

(FOD\1276\1993)

Disc No: FODA1.EDT/J012/10.09.93/DM/DH

New Ref: j:\editors\ca1\ocfiles\294\_46.sam

## ASI headings

Allergy: colourants: Cosmetics, Toiletry and Perfumery Association: Control of Substances Hazardous to Health Regulations 1988: henna: sensitisers.