

SAFEGUARDS

SGS CONSUMER TESTING SERVICES

HARDLINES

NO. 105/08 DECEMBER 2008

BEWARE OF IRRITATION FROM HAIR DYEING

Hair dyeing is very common in different regions around the world. In Europe, over 60% of women and approximately 10% of men colour their hair with an average frequency of 6-8 times per year.

Consumers may not recognise the potential harmful effect of hair dye. Frequent hair dyeing may lead to allergic contact dermatitis. With reference to patch test studies in Hong Kong, approximately 6% of the population develop allergic reactions against *p*-phenylenediamine (PPD), a commonly used ingredient in permanent hair dyes.

According to the study performed by the Scientific Committee on Consumer Product (SCCP), out of 46 hair dye ingredients, 27 were classified as skin sensitisers. Among these skin sensitisers, 10 were classified as "extreme", including PPD; 13 were classified as "strong", including 3-aminophenol; and 4 were classified as "moderate", including 2-methylresorcinol.

Although there is little evidence showing that hair dyeing promotes the development of cancer, it is not recommended for women in pregnancy or people with skin disease to use hair dye.



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Please find below our testing service of hair dye and bleaching agents for your reference:

Chemical	CAS No.	Restriction in EU 76/768/EEC	Conditions of use and warnings which must be printed on the label
Hair Dyes			
<i>o</i> -Phenylenediamine (OPD)	95-54-5	Prohibited.	/
<i>m</i> -Phenylenediamine (MPD)	108-45-2	Prohibited.	/
<i>p</i> -Phenylenediamine (PPD)	106-50-3	Maximum allowed concentration at 6% in oxidizing colouring agents for hair dyeing (a) general use; (b) professional use .	(a) Can cause an allergic reaction Contains phenylenediamines Do not use to dye eyelashes or eyebrows (b) For professional use only. Contains phenylenediamines Can cause an allergic reaction Wear suitable gloves.
2,5-Diaminotoluene	95-70-5	Maximum allowed concentration at 10% in oxidizing colouring agents for hair dyeing (a) general use; (b) professional use.	(a) Can cause an allergic reaction Contains phenylenediamines Do not use to dye eyelashes or eyebrows (b) For professional use only. Contains phenylenediamines Can cause an allergic reaction Wear suitable gloves.
3-Aminophenol	591-27-5	Maximum allowed concentration at 2% in oxidizing colouring agents for hair dyeing. In combination with hydrogen peroxide the maximum use concentration upon application is 1%.	Can cause allergic reaction.
Resorcinol	108-46-3	Maximum allowed concentration at 5% in oxidizing colouring agents for hair dyeing (1)(a) general use; (1)(a) professional use Maximum allowed concentration at 0.5% in (2) hair lotions and shampoos	(1)(a) Contains resorcinol, Rinse hair well after application, Do not use to dye eyelashes or eyebrows, Rinse eyes immediately if product comes into contact with them. (1)(b) For professional use only, Contains resorcinol, Rinse eyes immediately if product comes into contact with them, (2) Contains resorcinol.

(To be continued)

(Continued)

Chemical	CAS No.	Restriction in EU 76/768/EEC	Conditions of use and warnings which must be printed on the label
Hydroquinone	123-31-9	Prohibited	/
Bleaching Agents			
Hydrogen peroxide	7722-84-1	Maximum allowed concentration at 12% in hair-care preparations.	Wear suitable gloves, Contains hydrogen peroxide, Avoid contact with eyes, Rinse immediately if product comes into contact with them.
Ammonia	7664-41-7; 1336-21-6	Maximum allowed concentration at 6%.	Above 2%: contains ammonia

The EU commission is discussing new regulations for hair dyes in order to reduce the allowable concentrations and declarations. The new regulations should be published in 2009.

If you believe your hair dye product contains allergens, SGS can help to provide you with an answer. Contact us now!



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WHEN YOU NEED TO BE SURE

