Learning outcomes

- Maintain effective and safe methods of working when perming and neutralising hair.
- Prepare for perming and neutralising.
- Perm and neutralise hair.

Introduction

Perming is a complex, technical operation that involves the careful and accurate application of potentially damaging chemicals to the client's hair. If you get it right, then quite possibly no-one will ever know that the hair has been permed (except the client that is).

Successful perming relies heavily upon having a sound knowledge and the experience in knowing how different hair textures, types and densities will react when the movement is added.
## Understanding perming products

### Tools required for this treatment

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### Barrier cream

This is a thick protective cream that should be applied all the way around the client’s hairline before applying perm lotion (including the nape area) to avoid irritation of the skin. Care must be taken to avoid putting the cream on to the hair, as this will cause a barrier between the perm lotion and the hair and will result in straight areas. Clients with sensitive skin will be more likely to have a skin reaction from the perm lotion so always take the utmost care to avoid this happening.

### Pre-perm treatments

These products are applied to the hair after shampooing and before perm rods are used. They come in individual bottles or sprays and are used to:

- Even out the porosity along the hair shaft to help the perm lotion absorb at an even rate, which results in an even curl along the hair.
- Form a protective barrier along the cuticle region and close any cuticle scales that are raised.
- Make the hair more pliable when winding the perm rods into the hair.
Perm lotions
Perm products are available in varied forms such as acidic, alkaline and exothermic perm lotions, and come in varied strengths to suit all hair types.

Acid perm lotion
Has been developed as a kinder alternative to the original alkaline perm lotion.
The main ingredient is glycerol monothioglycollate.

Alkaline perm lotion
Generally stronger than acid perm lotion.
Main chemical ingredient is ammonium thioglycollate.

Exothermic perm lotion
Produce their own heat, once an activator has been added to the lotion.
It can be a mixture of acid or alkaline perm lotion, depending on the manufacturer (check ingredients).

How a perm works

The perming process has three stages - softening, moulding and fixing.

Softening
Perm lotion opens and swells the cuticle scales so that it can enter the cortex.

Moulding
The perm lotion enters the cortex where it deposits hydrogen. The hydrogen attaches itself to the disulphide bonds and breaks them apart into separate individual sulphur bonds. This allows the hair to take on the shape of the perm rod.

Fixing
Neutralising removes the hydrogen from the cortex by adding oxygen. The hydrogen attached to each sulphur bond combines with the oxygen molecule, creating H₂O (water). This process joins together the separated, individual sulphur bonds in a new position which permanently fixes the curl.
Post-perm treatments

Special anti-oxidant surface conditioners are produced for use after perming. They have special properties which enable them to:
- Close and smooth the cuticle scales.
- Return hair to its natural pH value (pH 4.5 – 5.5).
- Stop the chemicals working any further (stop creeping oxidation) which could cause over-processing.

Contraindications

Something that prevents you carrying out the treatment. It is vital that you ask your client if they suffer from any contraindications to establish whether it is safe to carry out the perm. Perming lotion can irritate sensitive or allergic skin and can be very painful if applied to skin with disorders such as psoriasis.

It is important to record your client’s responses to the questions you ask about contraindications, in order to have proof that they were asked before the treatment in case of any problems which may occur during or after the perm.

The following list indicates situations when perming should not be undertaken:
- Previous allergic reactions to perming products - the client is more likely to suffer an allergic reaction to your perm product or a chemical rearranger if they have previously had an allergic reaction to perm products or relaxers.
- Other known allergies - the client is more prone to suffer an allergic reaction to your perming type products if they have a history of allergic reactions and allergies to other products.
- Skin disorders - the disorder may cause discomfort to your client if open or sore. It may also be contagious or infectious. You should examine the scalp to see if there are any physical signs of skin abrasions, discolouration, swellings, infestation or infections.
- Incompatible products - may react with your perm products or chemical rearrangers and cause a chemical reaction or damage to the hair, skin or scalp. Compound henna and colour restorers are both incompatible products.
- Medical advice or instructions - the hair may not be suited to a chemical service if the client is on certain medications or in ill health.
- Previous chemical treatments - the hair may have too many chemicals present on the hair and the condition may not be good enough to sustain another chemical service, or the chemicals on the hair may not be compatible - see incompatible products above.
- Recent removal of hair extensions or plaits - the scalp may be tender and the hair follicles inflamed after the removal of hair extensions or plaits. This could lead to hair loss if excessive tension is applied when perm winding or an infection of the follicles if perm lotion and/or chemical rearranger is then applied.

Once you have identified a contraindication or have a problem test result, you need to know who you can ask for assistance in your salon. It is important that this person knows how to assess both contraindications and hair test results, and they will normally be a more senior member of your salon team.