

Title	Demonstrate knowledge of cosmetic chemistry and electrical currents relating to beauty therapy services		
Level	4	Credits	3

Purpose	People credited with this unit standard are able to: explain physical and chemical changes of matter involved in beauty therapy services; demonstrate knowledge of mixtures and ingredients within cosmetic products; and demonstrate knowledge of electrical currents used in beauty therapy services.
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Classification	Beauty Services > Beauty Therapy
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Available grade	Achieved
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Explanatory notes

Assessment information

Evidence generated during assessment against this unit standard must be consistent with industry practice and knowledge. Such knowledge is available in reference texts, models, and other information-bearing media. No one textbook or other source of information is envisaged, as new approaches to the study of chemistry and beauty therapy are published regularly.

Evidence generated during assessment against this unit standard must also be consistent with The New Zealand Association of Registered Beauty Therapists, *Code of Ethics for Members of The New Zealand Association of Registered Beauty Therapists Inc.* (9th ed, April 2009) (Auckland, NZ), and The New Zealand Association of Registered Beauty Therapists, *Health and Hygiene Guidelines* (1st ed, August 2016) (Auckland, NZ), both available from <http://www.beautynz.org.nz>.

Outcomes and evidence requirements

Outcome 1

Explain physical and chemical changes of matter involved in beauty therapy services.

Evidence requirements

1.1 Molecular and atomic structures and the three phases of matter are explained.

Range atomic structure (nucleus, protons, electrons, valency shells, neutrons); molecular structure (ionic, covalent), solids, liquids, gases.

- 1.2 The physical properties of matter are explained with reference to beauty therapy services.
- Range colour, odour, density, melting and boiling points, viscosity.
- 1.3 The chemical properties of matter are explained with reference to beauty therapy services.
- Range oxidisation, pH scale, salts.
- 1.4 The chemical and physical properties of water used in cosmetic products are explained.
- Range water purification processes, types of water, orange flower water, rose water, saline, witch hazel.
- 1.5 The effects of acids and alkalis on the skin are explained.

Outcome 2

Demonstrate knowledge of mixtures and ingredients within cosmetic products.

Evidence requirements

- 2.1 Types of mixtures used in cosmetic products are determined in terms of being homogeneous or heterogeneous.
- Range multifunction emulsions, surfactants, emulsions.
- 2.2 Additive ingredients in a cosmetic product are explained in terms of their purpose.
- Range includes but is not limited to – surfactants, preservatives, humectants, occludents, anti-oxidants (vitamins, CQ10), dyes, colours, perfumes.
- 2.3 Cosmetic ingredients used in mixtures for the face and body are described in terms of their use, purpose, and effect.
- Range oils/waxes, waters, powders (calamine, magnesium carbonate, flowers of sulphur, fullers earth, kaolin, zinc oxide), rubber, herbal extracts, essential oils, new technology ingredients, Alpha Hydroxy acids (AHAs), beta-hydroxy acids (BHAs), hydrocolloidal, protein, biological.

Outcome 3

Demonstrate knowledge of electrical currents used in beauty therapy services.

Range alternating current, direct current.

Evidence requirements

- 3.1 Services that require the use of direct current are identified, and the related benefits are described.
- Range iontophoresis, desincrustation, electrical epilation, micro-current.
- 3.2 Services that require the use of alternating current are identified, and the related benefits are described.
- Range direct high-frequency (HF), indirect HF, electrical epilation.
- 3.3 Conditions that require a referral to a senior colleague when using electrical currents for beauty therapy services are identified.
- Range may include but is not limited to – acne, comedogenic, sensitive, congested, ageing.
- 3.4 Response to identification of conditions that require a referral to a senior colleague when using electrical currents for beauty therapy services is described.
- Range inform the client of condition and impact on service, referral to senior colleague.

Planned review date	31 December 2021
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	15 September 2016	N/A

Consent and Moderation Requirements (CMR) reference	0035
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The

CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact the NZ Hair and Beauty Industry Training Organisation Inc enquiries@hito.org.nz if you wish to suggest changes to the content of this unit standard.