



**Australian Government**

# **SITHPAT403 Model sugar based decorations**

**Release 1**

## SITHPAT403 Model sugar based decorations

### Modification History

The version details of this endorsed unit of competency set are in the table below. The latest information is at the top.

Version	Comments
1.0	N Replaces but is not equivalent to SITHPAT010A Prepare and display sugar work. Title simplified. Re-worked Elements, Performance Criteria, Required Skills and Knowledge to more fully articulate content. Content about producing displays (centrepieces or showpieces) duplicates content of SITHPAT404 Design and produce sweet buffet showpieces and has been removed.

### Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to prepare liquid sugar and to model sugar based decorations for cakes and desserts. It requires the ability to design decorations and to pull, cast and blow sugar.

### Application of the Unit

This unit applies to hospitality and catering organisations which produce and serve specialist desserts and patisserie products including hotels, restaurants and patisseries.

The preparation and modelling of sugar is a high order technical skill used by experienced patissiers who operate independently or with limited guidance from others.

### Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

### Pre-Requisites

This unit must be assessed after the following prerequisite unit:	
SITXFSA101	Use hygienic practices for food safety

## **Employability Skills Information**

This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

### Elements and Performance Criteria

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

- |                                       |  |
|---------------------------------------|--|
| 1. Design decorative sugar work.      | 1.1 Design sugar based decorations for cakes and desserts.<br>1.2 Produce sketches of required forms and shapes.<br>1.3 Identify colours, decorations and supports.<br>1.4 Calculate and record required quantities of differently coloured sugar.   |
| 2. Select, prepare and use equipment. | 2.1 Select <b>equipment</b> of correct type and size.<br>2.2 Safely assemble and ensure cleanliness of equipment before use.<br>2.3 Use equipment safely and hygienically according to manufacturer instructions.  |
| 3. Boil sugar.                        | 3.1 Select, sort and assemble ingredients according to the sequencing of food production.<br>3.2 Combine sugar and water and boil to required temperature.<br>3.3 Add required colouring and flavourings according to design requirements.<br>3.4 Arrest the temperature at the correct point for pulling, casting or blowing.<br>3.5 <b>Safely handle boiled sugar solution</b> according to recipe requirements. |
| 4. Pull boiled sugar.                 | 4.1 Cool sugar solution to appropriate temperature for pulling.<br>4.2 Manipulate boiled sugar to avoid crust forming.<br>4.3 Turn out and pull sugar to incorporate air and to achieve elasticity and sheen.<br>4.4 Use a suitable work surface and work safely to avoid burns.   |
| 5. Store pulled sugar.                | 5.1 Portion pulled sugar according to intended use.<br>5.2 Use correct packaging methods and vacuum seal pulled sugar pieces.<br>5.3 Store pulled sugar in appropriate <b>environmental conditions</b> .   |
| 6. Blow sugar work.                   | 6.1 Create individual sugar pieces using appropriate blowing techniques.<br>6.2 Blow air through a blowpipe into boiled sugar of the correct temperature.  |

- 7. Cast sugar work.
  - 7.1 Prepare framework or moulds for individual sugar pieces.
  - 7.2 Cast boiled sugar, *shaping* into desired forms or moulds.
  - 7.3 Use appropriate techniques to achieve correct and even thickness.
  - 7.4 Remove formwork from sugar at the correct stage of hardening.
  - 7.5 Move sugar items to cool areas to accelerate cooling.
  - 7.6 Store cast sugar items in appropriate environmental conditions.

## Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

### Required skills

- initiative and enterprise skills to develop creative ideas and explore a range of designs for sugar decorations
  - literacy skills to write notes on designs and record calculations for sugar work ingredients
- numeracy skills to:
  - calculate quantities of ingredients required for decorations
  - weigh and measure ingredients for the quantity of sugar solution required
  - determine temperature, boiling and cooling times for sugar work
- planning and organising skills to efficiently sequence the stages of sugar work preparation and production
  - problem-solving skills to evaluate quality of finished decorations and make adjustments to ensure a quality product
- self-management skills to manage own speed, timing and productivity
- technology skills to use food preparation and cooking equipment.

### Required knowledge

- culinary terms and trade names for:
  - ingredients commonly used to produce sugar based decorations for cakes and desserts
  - a variety of classical and contemporary sugar based decorations for cakes and desserts
- historical and cultural derivations of a variety of sugar based decorations for cakes and desserts
- types of designs commonly used for sugar based decorations for cakes and desserts
- mise en place requirements for modelling sugar based decorations
- cookery methods for preparing sugar solutions:
  - combining ingredients
  - appropriate temperatures and cooking times
  - cooling methods and times
- required consistency of sugar solution for pulling, blowing casting
- causes of premature crystallisation of boiled sugar and methods to avoid it
- properties of the ingredients used and their interaction and changes during production
- techniques used to pull, cast and blow sugar
- dangers of handling boiled sugar at high temperatures and methods to avoid injury
- equipment used to prepare liquid sugar and to model sugar based decorations for cakes and desserts:
  - essential features and functions
  - safe operational practices
  - influence of cleanliness of equipment on the boiling process and quality outcome

- storage of ingredients and sugar based decorations:
  - correct environmental conditions to ensure food safety
  - appropriate methods to optimise shelf life.

## Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the ability to:

- design creative decorations for cakes and desserts
- model sugar based decorations for a variety of cakes and desserts using techniques for pulling, casting and blowing sugar
- produce a quantity of dessert decorations of the same type that are consistent in quality, size, shape and appearance
- integrate knowledge of the:
  - cookery methods for sugar work
  - temperature requirements, cooking times and techniques for pulling, casting and blowing sugar
  - essential features, functions and safe use of food preparation equipment
  - food safety practices for handling and storing sugar products
- produce sugar based decorations within commercial time constraints.

#### Context of and specific resources for assessment

Assessment must ensure use of:

- an operational pastry kitchen with the fixtures, large and small equipment and workplace documentation defined in the Assessment Guidelines including specific equipment for modelling sugar based decorations; this can be a:
  - real industry workplace
  - simulated industry environment such as a training kitchen servicing customers
- industry-realistic ratios of kitchen staff to customers
- designs for sugar based decorations for cakes and desserts
- a variety of commercial ingredients for modelling sugar based decorations for cakes and desserts.

#### Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct observation of the individual modelling sugar based decorations for a variety cakes and desserts
- evaluation of the taste and visual appeal of sugar based



decorations for cakes and desserts produced by the individual

- projects that allow assessment of the individual's ability to produce a variety of sugar based decorations for cakes and desserts for an event, function or meeting within designated deadlines
- written or oral questioning to assess knowledge of culinary terms, equipment, cookery methods and techniques for pulling, casting and blowing sugar
- review of portfolios of evidence and third-party workplace reports of on-the-job performance by the individual.

### **Guidance information for assessment**

The assessor should design integrated assessment activities to holistically assess this unit with other units relevant to the industry sector, workplace and job role, for example:

- SITHPAT306 Produce desserts
- SITHPAT404 Design and produce sweet buffet showpieces
- SITXFSA201 Participate in safe food handling practices
- SITXWHS301 Identify hazards, assess and control safety risks.

## Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Equipment*** for sugar work may include:

- airtight sugar display cases
- assorted rings, moulds, metal bars for poured and moulded sugar work
- basket weave boards (round and oval shaped) complete with metal rods
- blow torch
- blowpipes
- cake wheels
- chopping boards
- disposable gloves for pulling and shaping sugar
- hair drier with cold air setting
- hand pump for blowing sugar
- heat resistant plasticine
- heating lamp with red or white light
- marble slab
- measurers:
  - metric calibrated measuring jugs
- metal strapping
- modelling tools
- moulds
- patterns
- range of saucepans and pots for small and large production
- rubber mats
- saccharometer
- scissors
- shears
- silicon paper and mats
- small cooling fan
- spatulas
- storage containers and trays
- sugar boilers
- sugar thermometers.
- avoiding drips and dribbles
- covering exposed skin
- ensuring all equipment has secure handles

***Safely handling boiled sugar solution*** may include:

*Environmental conditions* may involve:

- using insulated pot rests
- using protective gloves and mitts.
- appropriate:
  - atmosphere
  - humidity
  - light
  - packaging
  - temperature
  - use of containers
  - ventilation
- avoiding damage to decorations.
- pouring boiled sugar into:
  - a framework
  - free-flowing shapes
  - moulds.

*Shaping* may involve:

## **Unit Sector(s)**

Hospitality

## **Competency Field**

Patisserie