



**Australian Government**

# **MSTGN2012 Work safely with chemicals in TCF operations**

**Release: 1**

# **MSTGN2012 Work safely with chemicals in TCF operations**

## **Modification History**

Release 1. Supersedes:

- LMTHL2004A Prepare chemicals to a formula
- LMTLA2001A Conduct safe handling of laundry chemicals
- LMTTX2015B Handle and prepare chemicals, dyes and other substances used in textile production

Not equivalent

## **Application**

This unit of competency covers the skills and knowledge required to handle and work with chemical substances and preparations that are used in sectors of the textile, clothing and footwear (TCF) industry. It includes cleaning chemicals and solvents commonly used in laundry operations and chemicals, dyes and other substances that are used in textile production.

This unit of competency is applicable to all sectors of the TCF industry.

It applies to operators who prepare, use and store chemicals for TCF operations. While the unit of competency relates to safe practices pertaining to all chemical handling, and use of a range of chemical substances, the application of the unit and the evidence requirements may focus on one or more industry sectors or workplace contexts.

Work may be conducted in small to large scale enterprises and may involve individual and team activities. Work is performed within defined procedures under direct supervision.

Licensing, legislative or certification requirements to work safely with chemicals may apply in some contexts.

## **Pre-requisite Unit**

Nil

## **Competency Field**

Generic

## **Unit Sector**

Not applicable

## **Elements and Performance Criteria**

Elements describe the      Performance criteria describe the performance needed to

essential outcomes.

demonstrate achievement of the element.

- |   |                                                   |     |                                                                                                                                                                       |
|---|---------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <b>Determine job requirements</b>                 | 1.1 | Follow standard operating procedures (SOPs)                                                                                                                           |
|   |                                                   | 1.2 | Comply with work health and safety (WHS) requirements at all times                                                                                                    |
|   |                                                   | 1.3 | Use appropriate personal protective equipment (PPE) in accordance with SOPs                                                                                           |
|   |                                                   | 1.4 | Identify job requirements from specifications, drawings, job sheets or work instructions                                                                              |
|   |                                                   |     |                                                                                                                                                                       |
| 2 | <b>Prepare to use chemicals in TCF operations</b> | 2.1 | Access information on chemicals and substances used in TCF enterprises                                                                                                |
|   |                                                   | 2.2 | Distinguish types of chemicals and preparations that require safe handling in own workplace                                                                           |
|   |                                                   | 2.3 | Identify personal responsibilities in working with chemicals                                                                                                          |
|   |                                                   | 2.4 | Interpret common terminology in safety data sheets (SDS) for chemicals used in cleaning, textile production or other application, according to workplace requirements |
|   |                                                   | 2.5 | Identify procedures for using chemicals in a cost-effective manner                                                                                                    |
|   |                                                   |     |                                                                                                                                                                       |
| 3 | <b>Identify chemical control measures</b>         | 3.1 | Identify location and storage conditions for substances and associated documentation                                                                                  |
|   |                                                   | 3.2 | Differentiate between a range of laundry and other chemicals, and identify risks associated with preparing and using chemicals                                        |
|   |                                                   | 3.3 | Identify risk control measures and special handling procedures for substances                                                                                         |
|   |                                                   | 3.4 | Implement correct procedures for calculating quantities and measuring chemicals                                                                                       |
|   |                                                   | 3.5 | Identify hazards associated with the handling and uses of substances used in the workplace, and the emergency procedures required                                     |

- |   |                                                      |     |                                                                                                                                        |
|---|------------------------------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------------|
|   |                                                      | 3.6 | Identify local procedures to document procedures and respond to environmental considerations                                           |
| 4 | <b>Apply safe handling of chemicals and solvents</b> | 4.1 | Ventilate work area and eliminate ignition sources                                                                                     |
|   |                                                      | 4.2 | Measure, handle and store according to WHS practices and workplace procedures                                                          |
|   |                                                      | 4.3 | Safely operate machinery and equipment associated with use of chemicals and solvents                                                   |
|   |                                                      | 4.4 | Demonstrate procedures to act upon accidents and emergencies according to procedures required for the chemical concerned               |
|   |                                                      | 4.5 | Use PPE according to regulations                                                                                                       |
| 5 | <b>Promote safe handling of chemicals</b>            | 5.1 | Maintain work area and dispose of chemicals according to regulatory requirements, environmental considerations and SDS recommendations |
|   |                                                      | 5.2 | Communicate handling and storage information within workplace                                                                          |
|   |                                                      | 5.3 | Complete required documentation                                                                                                        |
|   |                                                      | 5.4 | Clear spillages according to workplace procedures and complete housekeeping requirements                                               |
|   |                                                      | 5.5 | Report WHS issues, faults or emergencies to relevant personnel                                                                         |

## Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Range of Conditions

This field allows for different work environments and conditions that may affect performance.

Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

**Workplace procedures include one or more of the following:**

- requirements prescribed by legislation, awards, agreements and conditions of employment
- SOPs
- work instructions
- PPE
- oral, written and visual communication
- quality practices, including responsibility for maintenance of own work quality and contribution to quality improvement of team or section output
- housekeeping
- tasks related to environmental protection, waste disposal, pollution control and recycling
- WHS procedures

**Australian Standards include:**

- the relevant industry or Australian Standards that are current at the time this unit is being undertaken

**Access information on chemicals and substances includes, but is not limited to, one or more of the following:**

- identifying relevant regulations and codes of practice relating to the control of hazardous substances
- assessing workplace information and workplace procedures regarding the safe handling of chemicals used in job role in industry sector
- identifying chemicals and their characteristics
- differentiating between toxic agents, corrosives, reactives, and flammables and combustibles
- identifying workplace procedures for accessing stored substances and their housekeeping requirements
- locating relevant SDS for hazardous substances
- recognising and responding to signage and labelling

**Risks and hazards include, but are not limited to, one or more of the following:**

- exposure to chemicals, other harmful substances, machinery and equipment including:
- load shifting equipment, such as overhead cranes and forklifts
- production machinery and equipment

- inflammable materials and fire hazards
- manual handling of materials and equipment
- waste management and disposal
- extremes in weather conditions
- variations in lighting levels
- a range of floor surfaces
- water hazards
- accidents
- traffic flow, vehicle and equipment operation
- a range of storage areas
- health risks arising from exposure to chemicals

**Common terminology in safety data sheets (SDS) includes, but is not limited to, five or more of the following:**

- acute effect
- acute toxicity
- asphyxiant
- ceiling
- carcinogen
- chronic effect
- chronic toxicity
- combustible material
- corrosive
- decomposition
- dermal
- flash point
- flammable material
- ignition sources
- ingestion
- irritant
- mutagen
- oxidizer
- pH
- reactivity
- sensitizer
- solubility
- short-term exposure limit (STEL)
- teratogen
- threshold limit value (TLV)
- toxicity
- toxic substance
- time weighted average (TWA)

**Work environment includes, but is not limited to, one or more of the following:**

- operational workplace activities
- restricted space
- hazardous, controlled or exposed conditions
- day or night conditions

## Unit Mapping Information

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## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=a203ec5c-de7d-406b-b3e1-8f1a9b76e92e>