

UNIT CODE	CPCSIL3001
UNIT TITLE	Work with products and materials containing crystalline silica
APPLICATION	<p>This unit of competency specifies the skills and knowledge required to work with products and materials containing crystalline silica and respirable crystalline silica.</p> <p>The unit includes planning for and identifying tools and equipment, including personal protective and respiratory protective equipment to be used while working with products containing crystalline silica.</p> <p>The unit also covers the review of working with products containing crystalline silica.</p> <p>The worksites may be in factory or workshop settings or commercial and residential settings, construction sites, including demolition sites.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Relevant work health and safety state and territory regulatory authorities should be consulted to confirm jurisdictional requirements.</p>
PREREQUISITE UNIT	
COMPETENCY FIELD	Building and Construction
UNIT SECTOR	Building and Construction

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes of the unit.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare to handle products containing crystalline silica (CS).	<p>1.1 Interpret work requirements and instructions to handle identified products containing crystalline silica (CS).</p> <p>1.2 Seek feedback from supervisor when CS content of product or material is unknown or unclear.</p> <p>1.3 Read and interpret the safety data sheets for the products containing CS to identify the nature of the product, risk level, risk controls and personal exposure reduction requirements.</p> <p>1.4 Participate in consultations on matters affecting health and safety with respect to exposure to respirable crystalline silica (RCS).</p> <p>1.5 Classify level of exposure risk to airborne respiratory crystalline silica (RCS) for identified products, including likely duration of exposure.</p> <p>1.6 Identify the plant, tools, equipment, personal protective equipment (PPE) and respirable protective equipment (RPE) required to perform specified task and in accordance with the hierarchy of controls and regulatory requirements in your control.</p> <p>1.7 Contribute to the development of SWMS for planned work activity and work environment where required.</p> <p>1.8 Source and confirm serviceability of relevant plant, tools, equipment, personal protective equipment (PPE) and RPE to perform the work activity in accordance with WHS procedures.</p>
2. Perform work	<p>2.1 Review worksite for unplanned hazards and risks to be managed in accordance with WHS procedures.</p> <p>2.2 Perform fit checking of RPE in accordance with manufacturer's instructions and WHS procedures.</p> <p>2.3 Confirm risk control measures for planned work are in place accordance with WHS procedures and manufacturer's instructions.</p> <p>2.4 Perform work activities and continual monitoring of risk control measures in accordance with WHS procedures.</p>

<p>3. Perform maintenance activities and clean-up work area</p>	<p>3.1 Identify RPE maintenance, storage and waste disposal requirements in accordance with manufacturer’s instructions and WHS procedures.</p> <p>3.2 Clean up and dispose of dust and slurry from work area and PPE in accordance with WHS procedures.</p> <p>3.3 Clean, inspect and determine serviceability of RPE, tools and equipment, in accordance with WHS procedures and manufacturer’s instructions.</p> <p>3.4 Apply maintenance requirements and record and report findings of serviceability inspections in accordance with WHS procedures and manufacturer’s instructions.</p>
<p>4. Review working with products containing crystalline silica.</p>	<p>4.1 Assess effectiveness of the use of relevant tools, equipment and PPE and/or RPE in mitigating exposure risk.</p> <p>4.2 Record and report on workplace health and safety incidents resulting from work activities using the product(s) containing CS.</p> <p>4.3 Record and report on findings of handling and use of products containing crystalline silica, as part of workplace continuous improvement and WHS processes and requirements.</p>
<p>FOUNDATION SKILLS</p> <p>Foundation skills essential to performance are explicit in the performance criteria of this unit of competency</p>	
<p>UNIT MAPPING INFORMATION</p>	<p>No equivalent unit.</p>

TITLE	Assessment Requirements for Work with products containing crystalline silica.
PERFORMANCE EVIDENCE	<p>A person demonstrating competency in this unit must satisfy the requirements of the elements, performance criteria and foundation skills, of this unit, in addition to the specific performance and knowledge evidence described below.</p> <p>Candidates must be able to:</p> <ul style="list-style-type: none"> • demonstrate safe use of personal protective and respiratory protective equipment, including fit checking of disposable and re-usable devices for three different work activities in accordance with manufacturer’s instructions • demonstrate working, such as cutting, drilling or grinding with at least three different products containing crystalline silica applying all relevant health and safety considerations including dust capture and suppression measures, personal protective and/or respiratory protective equipment. • demonstrate cleaning and disposal of contaminated products and work area in accordance with WHS procedures.
KNOWLEDGE EVIDENCE	<p>To be competent in this unit, a candidate must demonstrate knowledge of:</p> <ul style="list-style-type: none"> • hierarchy of risk control measures: <ul style="list-style-type: none"> ○ elimination ○ substitution ○ isolation ○ engineering controls ○ administrative controls ○ PPE/RPE • health and safety risks working with products and materials containing crystalline silica features, commonalities and differences between crystalline silica and respirable crystalline silica • products containing crystalline silica, such as: <ul style="list-style-type: none"> ○ engineered stone ○ concrete ○ mortar ○ bricks ○ pavers ○ tiles ○ natural stone

- cement sheeting
- aerated concrete
- silica dust generated by workplace mechanical processes, such as:
 - cutting
 - crushing
 - drilling
 - grinding
 - cutting, grinding and/or abrasive polishing of engineered stone
- additional work activities that can generate respirable silica dust particles include:
 - excavation, earth moving and drilling plant operations
 - demolition
 - clay and stone processing machine operations
 - paving and surfacing
 - mining, quarrying and mineral ore treating processes
 - tunnelling
 - construction labouring activities
 - brick, concrete or stone cutting; especially using dry methods
 - abrasive blasting (blasting agent must not contain greater than 1 per cent of crystalline silica)
 - foundry casting
 - angle grinding, jack hammering and chiselling of concrete or masonry
 - hydraulic fracturing of gas and oil wells, and
 - pottery making
- worksites where silica dust can be found:
 - manufacturing environment
 - residential construction
 - commercial construction
 - civil construction
- AS/NZ 1715:2009 and AS/NZ 1716:2012 or their successors
- Relevant Australian Standards, regulations and codes of practice
- WHS procedures
- relevant legislation governing handling and working with products containing CS, including monitoring requirements
- employer responsibilities and duty of care requirements:
 - consultation and communication processes

	<ul style="list-style-type: none"> ○ health monitoring ○ personal exposure monitoring ● employee responsibilities and requirements ● use personal protective equipment (PPE) and compliant respiratory protective equipment (RPE), including disposable and re-usable devices with AS/NZ 1715:2009 and AS/NZ 1716:2012 or equivalent ● RPE: <ul style="list-style-type: none"> ○ half face disposable ○ half face reusable ○ full face reusable ○ powered air purifying respirators ● factors affecting fit of PPE and RPE e.g., beards and facial hair ● range of compliant plant, tools and equipment used with products containing crystalline silica ● relevant documents with information on safe work practices and technical information on products containing CS, such as: <ul style="list-style-type: none"> ○ Workplace health & safety policies and procedures ○ Relevant jurisdictional legislation ○ Relevant codes of practice ○ Safety Work Method Statements (SWMS) ○ Job Safety & Environmental Analysis (JSEA) ○ Safety Data Sheets (SDS) ○ Product manuals ○ Technical specifications ○ Product labels ● maintenance requirements on respirators for RCS and for power tools, plant and equipment ● safe cleaning & housekeeping methods with silica dust, including cleaning and managing wet or dry material on clothing ● dust control measures.
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<p>ASSESSMENT CONDITIONS</p>	<p>Assessment of performance must be undertaken in the workplace or simulated workplace environment. A simulated workplace is one that fully replicates the resources, environment and any time and productivity pressures that exist in the actual workplace, and which meets industry standards for safety and environmental practices.</p> <p>Candidates must be provided with access to:</p> <ul style="list-style-type: none"> • real or simulated worksites • environmental requirements and sustainability principles • relevant task or work specifications • appropriate documents, materials, tools, equipment, personal protective equipment (PPE) and P2 half-face disposable and re-usable respiratory protective equipment (RPE) and RPE currently approved for use in industry and worksite, as per codes of practice • relevant Australian Standards, legislation, regulations and requirements of workplace policies and procedures as required by Commonwealth, state and territory regulators. <p>Note: Where possible products used for training should contain low levels of silica to minimise the risk of exposure to respirable crystalline silica and where required, candidates must be clean shaven to wear relevant RPE, in accordance with manufacturer’s instructions.</p>
<p>LINKS</p>	<p>Link to Companion Volume Implementation Guide will be inserted here.</p>