UKATA

RCS 601

Syllabus: Control of Silica and Other Workplace Dust

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UKATA is a leading non-profit association dedicated to improving the quality and standards of asbestos, silica and dust control training.

Recognition and Grants

UKATA is an approved CITB 3rd Party Awarding Organisation for the Construction Training Register and Construction Training Directory. This syllabus has been mapped against the CITB standard and is available for automated grant payments to levy registered employers.

Grant rate/tier: £60 (Tier 1) | **Grant code: GET2530**

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This UKATA syllabus has been reviewed and independently certified as being suitable for CPD purposes by The CPD Certification Service.

UKATA holds ISO 9001 certification and continues to maintain the quality standard through annual auditing. ISO 9001 is a global standard for quality management systems (QMS), requiring organisations to demonstrate that their internal procedures meet rigorous guidelines, ensuring consistent delivery of quality products and services to customers and stakeholders.

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1. Course Title

Control of Silica and Other Workplace Dust

2. Introduction

This syllabus sets out the guidance issued by UKATA for the provision of Control of Silica and Other Workplace Dust training based on current HSE policy and as contained within the Health and Safety at Work, etc Act 1974 (HSW Act), the Management of Health and Safety at Work Regulations 1999 (MHSWR) and the Control of Substances Hazardous to Health Regulations 2002 (COSHH) (as amended).

This document provides the syllabus for the training along with guidance on the minimum content of all courses. Trainers can offer bespoke or tailored training for the remainder of any training session, but the core content must be adhered to.

This training is required to be given to employees whose work could foreseeably expose them to Respirable Crystalline Silica (RCS) and other workplace dust.

3. Purpose/Scope

To provide delegates with the theoretical and practical skills to develop the knowledge amongst employees as regards the hazards and risks posed by silica containing materials. The course further gives an overview of the legislative measures in place to permit employees to safeguard themselves and others affected by work activities.

4. Occupational Relevance

Supervisors and trades personnel, including trainees such as but not limited to: kitchen fitters, general maintenance staff, electricians, plumbers, gas fitters, painters and decorators, joiners, roofers, plasterers, heating and ventilation engineers, demolition workers, construction workers, architects, building surveyors, refractory production and cutting operatives/technicians, slate mining and slate processing workers, open cast mining workers, coal mining, quarry workers, stone manufacture workers, concrete manufacture workers, ceramic manufacture workers, glass manufacture workers, brick and tile manufacture workers, foundry workers, abrasive blasting workers, building and energy surveyors.

5. Duration

Minimum of 3.5 learning hours.

6. Delegate Pre-requisite

There are no delegate pre-requisites as part of this syllabus.

7. Individual Learning Needs

The Individual learning needs of delegates must be assessed by the tutor prior to the course commencing and the training adapted where necessary.

8. Instruction/Supervision

As a minimum, all UKATA Tutors must meet the following criteria for delivering the UKATA Control of Silica and Other Workplace Dust training:

- Tutors must have a minimum of at least three years' experience (within the past five years) in the health & safety industry. This will be taken to include, construction management, construction supervision, consultancy, training etc. and must be able to demonstrate a comprehensive practical working knowledge, within the health & safety industry, including its legislative requirements.
- Hold a suitable qualification recognised by the health & safety industry, which may include: NEBOSH National Certificate in Construction Safety and Health, NVQ/SVQ Level 6 in Occupational Safety & Health, Health & Safety Degree, NEBOSH Diploma in Occupational Safety and Health, Diploma Safety Management Level 6, or other such qualifications that UKATA deems to be acceptable;
- A successful UKATA Audit, or an internal Audit undertaken by the Member company they are working for;
- Once the above criteria have been satisfied, the Tutor must successfully pass the UKATA Control of Silica and Other Workplace Dust Tutor Knowledge Test.

9. Delivery

Training must be delivered in a suitable environment and in accordance with the UKATA Training Centre & Equipment Minimum Standards. All equipment must be of a suitable quality and quantity for delegates to achieve learning outcomes and must comply with relevant legislation.

The class size and tutor to delegate ratio must allow training to be delivered in a safe manner and enable delegates to achieve the learning outcomes. The approved training delivery methods for this training along with the maximum tutor to delegate ratios are:

Delivery method	**Tutor to delegate ratio**
Classroom	1:15 (maximum)
Virtual Classroom	1:12 (maximum)

10. Assessment

Attainment of the learning outcomes will be assessed by a multiple-choice exam consisting of at least 15 questions taken from the UKATA question bank and sat under exam conditions. At the discretion of the tutor, delegates shall be permitted to refer to any notes they make during the training session, or the training manual/notes provided by the tutor.

Delegates will be required to achieve a score of at least 12 out of 15 (80%) in the exam. Failure to achieve this will result in the delegate requiring to re-sit the exam under exam conditions. If a delegate fails the second attempt, they will be required to re-sit the course in its entirety.

The exam should have a completion time of approximately 20 minutes. However, the tutor should recognise that delegates learning needs are varied and therefore the time stated is for guidance only.

The varied needs of delegates include the ability to fully comprehend written English and the tutor may read out the questions to assist such delegates, however no assistance may be offered in respect of providing answers.

11. Quality Assurance

Quality assurance against this syllabus requires verification and approval of the presentation materials, exam papers, course handouts and tutor narrative. Independent audits are carried out to demonstrate conformity with the training standards set by UKATA and each tutor maintains a CPD record that aligns with the UKATA Tutor Competency Framework.

UKATA prides itself on numerous accreditations and certifications that reflect our commitment to the highest standards of service and quality. A detailed list of these can be accessed at: UKATA Accreditations.

12. Renewal/Refresher

Certification for this training course will be valid for one year.

It is recommended that renewal/refresher training is carried out annually.

Following the certification expiration date, a grace period of six months is permitted for refresher training to be delivered. The employer should, in this case, carry out a TNA and discuss the training requirements with the training provider.

13. Approved Date

13th April 2023

14. Review Cycle

Either on request or within 3 years from approval date.

15. Additional Resources

https://www.hse.gov.uk/pubns/indg463.htm	Control of exposure to silica dust. A guide for employees.
https://www.hse.gov.uk/pubns/priced/eh40.pdf	EH/40/2005 Workplace exposure limits (Fourth Edition 2020)
https://www.hse.gov.uk/lung-disease/silicosis.htm	Reducing exposures to silica in the workplace.
https://www.hse.gov.uk/pubns/cis36.pdf	Construction dust. Information Sheet No 36 (Revision 3).
https://www.hse.gov.uk/pubns/guidance/g404.pdf	Health surveillance for those exposed to respirable crystalline silica (RCS).
https://www.hse.gov.uk/coshh/essentials/direct-advice/construction-silica.htm	Direct advice sheets for industries. Silica.
https://www.hse.gov.uk/pUbns/priced/l5.pdf	Control of substances hazardous to health. The Control of Substances Hazardous to Health Regulations 2002 (as amended). Approved Code of Practice and guidance.

16. Learning Outcomes

Understanding silica and other workplace dust properties and health risks

- Identify and describe the different types and properties of silica and other workplace dust, including respirable crystalline silica (RCS), wood dust, and general dust.
- Analyse the health risks associated with silica and other workplace dust exposure, including the impact of smoking on risk levels.
- Review general epidemiology and statistics related to diseases caused by silica and other workplace dust exposure.

Knowledge of silica and dust use in buildings and industry

- Recognise various types of silica-containing materials and their common uses in construction, manufacturing, and other industries.
- Identify where silica, silica-containing materials, and other types of workplace dust can typically be found within buildings and industrial settings.
- Understand the reasons behind the use of silica and other dust-producing materials in construction and industrial processes.

Risk avoidance and management strategies

- Describe the risks of dust release from various materials and how friability affects these risks.
- Demonstrate how to find information on the presence of silica and other dusts before starting work to ensure proper precautions are taken.
- Explain the emergency procedures for situations where silica dust or other harmful workplace dusts are unexpectedly disturbed or discovered.

Legislative framework surrounding silica and dust control

- Comprehend the role of silica and dust control legislation within the broader context of health and safety laws.
- Summarise key legislation and regulations relevant to the control of silica and other workplace dust, focusing on their implications for workplace safety.
- Understand the importance of compliance with health surveillance and risk assessment protocols to manage the exposure to silica and other workplace dusts effectively.

17. Required Course Content

MODULE 1	DURATION: APPROXIMATELY 30 MINUTES
	Understand what silica and other workplace dust is and have an increased awareness of the nature, properties, and effects on health.
	1.1 Define the term workplace dust, including: • Silica dust - created when working on silica containing materials like concrete, mortar and sandstone (also known as respirable crystalline silica or RCS); • Wood dust: created when working on softwood, hardwood and wood-based products like MDF and plywood; • Other 'general' dust – created when working on other materials containing very little or no silica. The most common include gypsum (e.g., in plasterboard), limestone, marble and dolomite.
	1.2 Describe the properties of silica: • The natural origin and physical properties of silica which makes it invaluable to construction, transport, and industry; • Quartz, Tridymite and Cristobalite; the common names and characteristics of these minerals; • The geographical sources of silica and brief history of the use of silica containing materials and associated exposure to RCS.
	1.3 The risks to and effects on health caused by exposure to RCS and other workplace dust: • The basic structure of the respiratory system in order to understand diseases related to silica and other workplace dust; • How silica and other workplace dust can become respirable; • Silicosis; chronic obstructive pulmonary disease (COPD); asthma, lung cancer; • Risk of developing disease; • Increased danger to workers who smoke; • Workplace Exposure Levels (WEL's) • Latency periods and the amount of exposure required to cause specific diseases.
	1.4 General epidemiology and statistics: • Provide general statistics on the epidemiology and current HSE statistics on silica and other workplace dust related mortality.

MODULE 2	DURATION: APPROXIMATELY 45 MINUTES
	Understand the types, uses, associated risks and likely occurrence of silica, silica containing materials and other materials in buildings, plant and industry.
	2.1 Outline the types of silica containing materials and where they can be typically found: • Provide a descriptive and pictorial overview of silica containing materials with sufficient information, including the reasons for the use of silica containing materials; • Illustrate the typical areas where silica containing materials can be found in, including but not limited to: buildings, highways and railway infrastructure, water and sewerage systems; and their uses within such areas; • A minimum of 30 assorted product photographs sequenced in such a way that delegates develop an understanding of the risk levels associated with silica containing materials. Examples may include (listed in increasing order of silica content): - Marble (2%) - Limestone (2%) - Brick (Up to 30%) - Slate (20–40%) - Granite (20–45%, typically 30%) - Tile (30–45%) - Manufactured building blocks (20–70%) - Concrete, mortar (25–70%) - Sandstone (70-90%)
	2.2 Provide a descriptive and pictorial overview of other typical materials that create workplace dust, including but not limited to: softwood, hardwood, wood-based products and other materials containing very little or no silica.

MODULE 3	DURATION: APPROXIMATELY 1 HOUR 45 MINUTES
	Risk Control: How to avoid the risks from airborne dusts.
	3.1 Understand how friability impacts on the risk of RCS released from materials such as; sandstone, concrete, mortar, manufactured building blocks, tile, granite, slate, brick, limestone and marble.
	3.2 Describe the actions to be taken if suspected silica containing materials are discovered or accidentally disturbed.
	3.3 Understand the difference between toxic/carcinogenic materials and where to obtain that information.
	3.4 Understand how to assess the risk, including examples of high-risk tasks, risk assessments and how high dust levels are caused by the task, work area, time or frequency.
	3.5 Understand how to control the risk, including examples of controls for common high-risk tasks and the use of various control measures: • Hierarchy of controls; • Stop and reduce the dust; • Control the dust; • RPE; • Other controls.
	3.6 Understand how to review the controls by: • Ensuring the procedure is done correctly; • Checking controls are effective; • Involving workers; • Maintaining equipment; • Supervising workers; • Health surveillance.
	3.7 Understand how to avoid the risk of other workplace dust released from materials such as; softwood, hardwood, wood-based products and other materials containing very little or no silica by using controls such as dust extraction.

MODULE 4	DURATION: APPROXIMATELY 30 MINUTES
	Outline of legislation relating to silica and other workplace dusts.
	4.1 Outline of the origins of silica and other workplace dust legislation and how it fits into the wider context of health and safety legislation.
	4.2 Outline the regulations governing work with silica containing materials.
	4.3 Work with RCS and other workplace dust covered by COSHH and current HSE guidance.
	Additional legislation for Architects, Designers, and other allied professionals.
	4.4 In addition to the legislative content outlined in module 4 above: • CDM 2015 Clients, Designers, Principal Contractors and Sub-Contractors duties and responsibilities - ACoP (L153).