

COSHH Assessment for:		Silica Dust- Respirable crystalline silica (quartz)				Ref:	88
Assessor:	Sam Fedzin	Date:	June 2022	Next Review:	June 2025		
Describe the activity or work process:							
Silica dust is generated by various activities such as cutting, pulverising and crushing stone and concrete.							
What is the location of the activity or work process?							
Various site locations as per client specification and project plan.							
Identify the Persons at Risk:		Employees	☒	Contractors	☒	Public	
Name the substance involved in the process, the quantity and its manufacturer. (A copy of a current safety data sheet for this substance should be attached)							
Silica dust, dust is a bi product of cutting, pulverising and crushing stone and concrete materials. The quantity generated will be reduced as far as possible using dust suppression techniques and avoiding cutting, grinding and crushing if possible.							
Explain why a safer alternative cannot be used:							
The material to be cut is as specified by the client therefore the substance cannot be substituted.							
Classification (tick all that apply):							
Physical Hazards							
Unstable Explosive		Flammable		Oxidising		Compressed Gas	
							
Applicable: ☐		Applicable: ☐		Applicable: ☐		Applicable: ☐	
Health Hazards							Environmental
Toxic		Corrosive		Irritant		Resp. Sens/Health	
							
Applicable: ☐		Applicable: ☐		Applicable: ☒		Applicable: ☒	
Applicable: ☐		Applicable: ☐		Applicable: ☐		Applicable: ☐	
Hazard Type:							
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other:
				☒			
Route of Exposure:							
Inhalation		Skin		Eyes		Ingestion	
☒				☒			
Explosive Limits and Workplace Exposure Limits (WELs)							
Long-term exposure level (8hrTWA):				Short-term exposure level (15 mins):			
Silica 0.1mg/m3				N/A			
Detail Potential Health Risks:							
Specific target organ toxicity – repeated exposure (Category 1) Prolonged inhalation over the exposure limit can cause silicosis; an fibrotic scarring of the lungs which causes gradual degradation of lung function which can culminate in death. Acute exposure to dust can cause irritation and damage to the eyes and respiratory system through mechanical action.							

Control & Recovery Measures Actioned: (for example extraction, ventilation, training, supervision). Include special measures for vulnerable groups, such as disabled people and pregnant workers. Take account of those substances that are produced from activities undertaken by another employer's employees.					
Ventilation:			Accidental Release & Spillage Plan :		
Activities generally take place outdoors. Further assessment required for indoor activities.			Wet swab spilled material; scrape up into sealable container		
Special Transport:			Signage, provision of information and instruction :		
N/A			Briefing of this assessment and toolbox talks.		
Fire Precautions/Extinguisher Type:			Environmental Considerations :		
N/A – non flammable			N/A		
Storage Required:			Disposal Issues:		
No special requirements			No special requirements – general construction waste		
Is health surveillance or monitoring required for foreseeable exposure potential?					
Routine health screening	No	Personal air monitoring	No	Background air monitoring	No
Personal Protective Equipment (state type and standard)					
Item	Tick	Requirement	Item	Tick	Requirement
	✓	Operatives working in close proximity to processes which release stone/concrete dust should wear a well fitted type P3 mask.			
				✓	Wear Impact Goggles (BS EN 166 Class 1B CE minimum) if cutting to protect eyes from dust and debris. Glasses may be necessary in windy conditions.
	✓	General purpose gloves (BS EN 388 : 1994, Rating: 2 1 2 1) to prevent skin irritation.		✓	Issued work wear.
	✓	Wear Safety footwear (EN345 SB Compliant) at all times	Other	✓	Use dust suppression and wetting down techniques to reduce dust released into the air.
First Aid Measures					
Inhalation – Remove victim to fresh air Eyes – Wash with plenty of water. Skin – Wash with soap and water.					
Disposal Instructions for substance and empty containers:					
Hazardous Waste			General Waste		✓
Return to Depot			Return to Supplier		
Other/Notes:					
Is exposure adequately controlled?				Yes	✓
Risk Rating Following Above Controls:				High	Med
				Low	✓