

Individual monitor  
for respirable dust  
and crystalline silica  
exposure



## MEASURE WORKERS' INDIVIDUAL EXPOSURE

EN-481

Complies with standard **EN-481**

mCerts

**mCerts** certified

95%

The **uDust** algorithm exceeds  
**95 % crystal silica** recognition



Light and compact : **215g**



**8h** battery life



Real-time analysis



All **respirable dusts** including  
**crystalline silica**



**3G/4G** and **WiFi** connectivity



Backup on **microSD** card



**1 year** warranty

## uDust benefits

COMPLY WITH EVER STRICTER  
**REGULATION ON WORKPLACE  
EXPOSURE LEVELS**

**COMPLIANT WITH RESPIRABLE  
DUST MONITORING STANDARD  
(EN 481, MCERTS)**

REINFORCED CONTROL OF  
THE **EFFICIENCY OF MEANS  
OF PREVENTION AND  
PROTECTION IN PLACE**

A **UNIQUE AND PATENTED  
METHOD OF IDENTIFICATION**

**TRAINING AND INCREASED  
AWARENESS OF RISKS LINKED  
TO DUSTS**

# TECHNOLOGY FOR MONITORING RESPIRABLE CRYSTALLINE SILICA HAVE BEEN LAGGING BEHIND REGULATION

In the light of accumulating scientific evidence and the growing awareness of health authorities, **workplace exposure limits for respirable dusts** with no specific effect and respirable crystalline silica dusts are **regularly lowered** to better protect exposed workers. In closed environments, these ultra-fine dusts remain suspended in the air, long after the activities that generated them have ceased.

Since they are imperceptible to humans (odorless and invisible to the naked eye), the only way to identify them until now has been to take spot samples and have them laboratory-tested. This method overlooks the daily life of workers outside the sampling periods, ignores possible peaks in exposure, and does not allow for fine-tuning prevention and protection measures to the reality of exposure.

## WHAT EXPOSURE REGULATIONS

In the UK, Workplace Exposure Limits are (eight-hour weighted average):

- Respirable dust: **4 mg/m<sup>3</sup>**
- Respirable Crystalline Silica dust: **0,1 mg/m<sup>3</sup>**

Where workers are regularly exposed to respirable crystalline silica (RCS) dust and there is a reasonable likelihood that silicosis may develop, health surveillance must be provided by an occupational health professional (doctor or nurse).



Click on the picture or scan the QR code to download our White Paper and learn everything about Respirable Crystalline Silica

## uDUST : A SENSOR WITH CUTTING-EDGE TECHNOLOGY

### How does it work ?

Scan the QR code to view our explainer video



The uDust sensor analyzes a continuous stream of air using **spectrophotometry**: counting and measuring dust by analyzing the deformation of a laser beam.

Our **patented algorithm** compares the properties of dusts detected in the ambient air (number, shape, etc.) to those in our database in real time, and recognizes those containing respirable crystalline silica.

### Example of a use-case

Workers on a tunnel site no longer wear their personal protective equipment as consistently, because they have the impression that there is less dust. They are equipped with uDust sensors

to make them aware that respirable dust, including crystalline silica, is imperceptible but nevertheless present. With this information constantly available, PPE compliance can be reinforced.



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