

Individual monitor
for respirable dust
and crystalline silica
exposure



MEASURE WORKERS' INDIVIDUAL EXPOSURE

-  Complies with standard **EN-481**
-  **mCerts** certified
-  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/m³**
- Respirable Crystalline Silica dust: **0,1 mg/m³**

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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