

## Sharing knowledge...

**Shift your horizon.**

**Feel free to contact us.**

### Exposure management

Everything has its limits. According to the ALARA Principle, you have to set exposure limits As Low As Reasonably Achievable. But what is “low” and what is “achievable”? It all starts with knowing your limits.

#### A workplace that motivates

Inhalation exposure is one risk workers face, from inhaling gases, vapours, aerosols, dust and fibres which may be present in the air. It is difficult to assess exposure because of the variety of substances present. In addition, particle size may vary with time and place. Particle size in its turn determines the rate of uptake in the body. Dermal exposure is another route of exposure. It can occur from a spill on the skin. Exposure may cause a health hazard. According to the precautionary principle employers have to do their utmost to keep employees healthy. By taking the necessary steps to minimise exposure, you create a safer and healthier workplace where workers feel appreciated and are motivated to do their very best.

#### What can we do for you?

##### *Analysis of situation: collecting and interpreting data*

We use a standard process to identify potential exposure risks in your operations. It is based on the formula of: hazard x exposure = risk. Our services can include:

- Quantitative assessment of chemicals and (micro)biological agents
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- Sampling and characterisation of substances, including engineered nano particles, fine particles, fibres, dust and exhaust fumes
- Measuring chemical emissions and exposure and aerosols
- Migration studies
- Analysis of available data: gap analysis and desk research
- Toxicological air measurements
- Detection of diffuse leakages and working out diffuse leakage programs
- Exposure assessments of workers
- Assessment of indoor working climate, sound levels, ergonomics, etc.

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*Advice on implementing the appropriate preventative systems*

We have experience in implementing industry standard prevention programmes like STOP: substitution, technical measurements, organisational measurements and personal protection.

*Specialised sampling and testing resources*

We are one of the few research facilities in the world that offers a full range of specialised testing equipment to analyse everything from chemicals and micro biological agents to fine particles. In particular, we offer sampler technology that is designed specifically for collecting samples in the nano spectrum down to 1 nm. We use SEM, TEM and many other specialised instruments to precisely characterise the nature of nano particles, dust and other fine particles. Based on this highly specific data, our specialists can make the invisible visible so you can take the appropriate protective measures.

*Shift your horizon*

The border between the earth and sky changes whenever you change your perspective. At DSM Resolve we can help you shift your horizon to address your challenges. We are a competence center that offers the full spectrum of R&D support for products and processes based on years of experience in the chemical arena.

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