



CS₂ - Safe and quick remediation

ISTR[®]

Carbon disulfide, or CS₂, is a colourless and volatile fluid. It is used in the (organic) chemical industry as a raw material and sometimes also as a solvent. Carbon disulfide has a very low self-ignition temperature.

General information:

Name: Carbon disulfide
Chemical formula: CS₂
CAS-number: 75-15-0

Carbon disulfide and remediation

CS₂ is volatile and has a very low flash point. CS₂ dissolves easily and adsorbs reasonably well.



Carbon disulfide – Safe and quick remediation possible with the right reagent formulation

Challenge

Carbon disulfide is a highly flammable pollutant. In contact with air this substance can easily ignite at relatively low temperatures. A remediation method that does not require removal of the pollutant (in situ) is therefore preferred.

Approach

Soil contaminated with carbon disulfide should not be cleaned up with an above ground, ex situ treatment. By evaluation of the existing remediation techniques and analysis of the available data on carbon disulfide, In-Situ Technieken has developed a new reagent formulation for in situ remediation of this volatile substance. By allowing a controlled reaction to take place in the soil, the contamination is broken down in an efficient and safe manner. During the remediation of such a volatile contaminant, the safety of both our own staff and other people has the highest priority.

Result

The use of the correct in situ chemical oxidation (ISCO) reagent formulation allows carbon disulfide to be converted into environmentally harmless components quickly, efficiently and, most importantly, safely.

In-Situ Technieken

In-Situ Technieken has extensive knowledge of numerous remediation techniques for the treatment of contaminated soils and groundwater. Many of these techniques have been developed in-house and patented. To facilitate continuous updating of our innovative techniques, we make use of our own laboratory and a large library, and cooperate closely with the scientific community. We have a successful track record in remediating difficult contaminants and excel in developing innovative techniques. Whatever the contamination, we can practically always offer you a suitable solution.

In-Situ Technieken has successfully completed a large number of remediation projects. Various remediation techniques have been applied during these projects, such as in situ chemical oxidation (ISCO), soil vapour extraction (SVE), multiphase extraction (MPE), air sparging, immobilisation, enhanced biological degradation, and pump and treat (P&T).

ISTR[®]

We have the knowledge and experience in house to offer a remediation solution for a wide range of chemicals that are inherently difficult to treat. The proven method used for this purpose by In-Situ Technieken is In Situ Targeted Remediation (ISTR[®]). We use ISTR[®] to remediate various contaminants in differing geological and hydrogeological profiles quickly, safely and in a controlled manner. Every project receives its own specific approach, with safety and flexibility as key features. In-Situ Technieken – a trade name of ARCADIS – is fully certified for carrying out (soil) remediation projects and operates world-wide.

For more information:

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