

CET's CDS[®] decontamination solution

Product Specifications

G- Series Agents: CET's CDS[®] decontamination solution uses perhydrolysis or hydrolysis only

VX Nerve Agents: CET's CDS[®] decontamination solution uses perhydrolysis and catalyzed oxidation

HD Sulfur Mustard Agents: CET'S CDS[®] decontamination solution neutralizes HD mainly by catalyzed oxidation

Chemical Demilitarization: CET'S CDS[®] decontamination solution is currently being used at Chemical Demilitarization facilities for operations. This includes the decontamination of equipment and materials in preparation for changeovers.

CET'S CDS[®] decontamination solution was developed by CET, LLC. to provide a highly effective chemical decontaminant alternative for traditional chemical warfare agents, toxic industrial chemicals, and biological toxins. Extensive testing by third party laboratories has proven that it is one of the most effective chemical decontaminants available today and yet it is environmentally safe and maintains outstanding compatibility with a wide range of materials.

CET'S CDS[®] decontamination solution comes two part; Part A and Part B. The shelf life is currently one year but testing continues to determine how far beyond one year the efficacy may be maintained. Once mixed, CET'S CDS[®] decontamination solution may be used for several hours before efficacy begins to decline.

CET'S CDS[®] decontamination solution may be delivered in a variety of ways. CET's Electrostatic Delivery System provides highly efficient transfer of decontaminants to surfaces. With the electrostatically charged liquid droplets, it can provide coverage of non-line-of-sight and complex surfaces even in a moderate wind. It can also knock down aerosolized agents.

Through an array of challenges, CET'S CDS[®] decontamination solution has displayed superior performance over other decontaminants. In addition to exceptional perhydrolysis capacity, CET'S CDS[®] decontamination solution has catalyzed oxidation capability that effectively neutralizes organic sulfides, such as HD, and organic nitrogen, such as the VX organic amine degradation product. CET'S CDS[®] decontamination solution has been formulated to neutralize agents on surfaces in a variety of deposition patterns without mechanical mixing. Testing performed at the Midwest Research Institute (MRI) displays the efficacy of CET'S CDS[®] decontamination solution in a mixed vial reaction and on deposits of neat material on panels. Results show that it achieves greater than a five log reduction (D) for HD in a mixed reaction using 200 mg of HD against 6.7 ml of CET'S CDS[®] decontamination solution. The analysis was performed using GC/FPD and GC/PFPD. For VX, there was a reduction of 99.9997% in vials for a five minute reaction. Using LC/MS analysis, it was determined that there was no undesirable EA 2192 degradation product.

Summary of Effectiveness against CWAs		
Chemical Agent	Format	D(%)
HD	Vial	>99.9997
	Aluminum Panel	99.983
VX	Vial	99.9997
	Aluminum Panel	99.560
GB	Vial	>99.9996
	Aluminum Panel	99.68

Challenge = 5-10g/m² (average deposition), Panel size = 10cm², Contact Time = 20 min (vial), 25 min (panel), Ratio of agent to CDS[®] = 30mg/ml



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