

# POLYCAT

## NEXTGEN DECON SYSTEMS



# Spill-CAT™

## DRY DECON POWDER

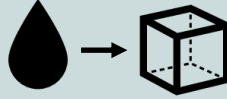
### What is Spill-CAT?

Spill-CAT is a range of dry catalytic powders designed to absorb and degrade CWAs and toxic chemicals.



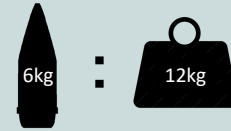
### How does it work?

The powder works by rapidly immobilizing the liquid CWA in a solid matrix before degrading the agent and producing a solid mass in a multi-step process.



### How much do you need?

The ratio of powder to agent is 2:1 by weight. E.g. for a 155mm shell with 5L (6kg) of Sulfur Mustard, only 12 kg of Spill-CAT powder is required.



### How long does it take?

Depending on the agent and the temperature, full degradation can take between 8 hours and 7 days.



### Why use Spill-CAT?

- **Quiet and Discrete** – Contained reaction with minimal off-gassing.
- **Dry Decon Solution** – No water or other reactants required for liquid CWAs.
- **Lightweight and Man-portable** – Very low ratio of Spill-CAT powder to agent required when compared with traditional decon options.
- **Safe and Easy to Use** – Very low hazard. Pre-mixed and ready for use.
- **Compatibility** – Spill-CAT deployment systems are fitted with Stäubli connectors to allow integration with agent transfer systems such as Viper & Monica (Valent Applications Ltd., sales@valentapplications.co.uk).
- **Disposal** – Once complete, keep sealed and dispose of with other contaminated waste, e.g. used gloves.

Spill-CAT is available in four formulations, each one targeted to a specific group of CWAs. Spill-CAT has been successfully tested and found to degrade live CWAs at levels >99 %.

MMx	Breakdown (%)
HD (Sulfur Mustard)	99.3
L1 (Lewisite-1)	99.9
L (Technical Lewisite)	99.7
YA (50:50 HD:L mixture)	99.7
GMx	Breakdown (%)
GA (Tabun)	99.9
GB (Sarin)	99.9
VMx	Breakdown (%)
VX	99.5
SMx	Breakdown (%)
DA (Clark 1)*	99.9
DC (Clark 2)*	99.9
DM (Adamsite)*	99.9

\*A small volume of organic solvent is required to solubilise the solid agents.

### Availability

- Large scale testing with live CWAs are underway
- Available to buy Q4 2024

## Spill-CAT Deployment Systems

Disabling threats in a compromised area?



### Kill Bag

Tactical Neutralisation Kit

**Portability** – The Kill Bag system utilises a multi-layered chemically resistant bag that allows the kit to be carried in a standard Bergen for easy transport and deployment in the field.

**Ease of use** – The kit can be assembled in a few minutes and can be connected to industry standard CWA munition access tools.



Agent Capacity
1 - 5L <sup>†</sup>
Dimensions (Packed)
W 340mm
D 260mm
H 300mm
Weight
5.5 kg (1L)

Disposing of CWA stockpiles or transporting damaged shells?



### Kill Drum

CWA Disposal / Transport

**Disposal** – The Kill Drum system can be deployed at base or in the field and agent can be directly transferred into the drum allowing quick disposal of CWA payloads from stockpiles or found munitions.

**Transport** – The lid can be removed to allow shells to be placed inside, providing a quick and safe transport method for damaged or leaking shells.



Agent Capacity
5 - 35L <sup>†</sup>
Dimensions
Ø 320mm
H 530mm
Weight
15.4 kg (5L)

Decontaminating vehicles or dealing with a spill?



### Dry Spray

Surface Decontamination / Spill

**Decontamination** – The Dry Spray system is a pressurised sprayer that allows quick coverage of large areas for surface or vehicle decontamination.

**Coverage** – 2kg powder capacity allows neutralisation of up to 1kg of CWA.



Powder Capacity
2kg <sup>†</sup>
Dimensions
Ø 127mm
H 430mm
Weight
3 kg

<sup>†</sup>Agent capacity sizes given as examples, custom sizes for all deployment systems available on request.

