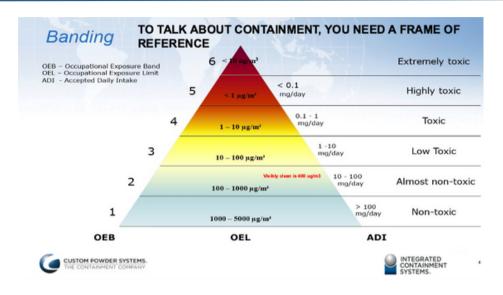






## Containment Tool Box



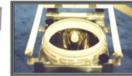
The potency of APIs (Active Pharmaceutical Ingredients) in OSD (Oral Solids Dosage) formulations has been increasing for years and the number of potent compounds only continue to grow. This necessitates additional provisions to protect personnel from exposure to these chemicals.

The risk or exposure or containment of a potent compound exists in the technology used for product transfers. It is very simple to assure containment once the product is in a "box" but the process of putting in the box or removing is where the risk/challenge lies. There are many ways and units used to express the containment level need of a system. This banding diagram provided here gives a convenient cross reference across different containment level terminology. Setting the containment level is the first important first step to communicate a measurable threshold for your vendor to achieve. This paired with a well thought out URS gives the basis for further discussion with your vendor partner.

We have a toolbox of 13 principle containment devices we use in our OSD system designs; 10 being active barriers that prevent product release and three basic devices that capture the product release during a transfer operation. As vendor we must achieve the clearest possible understanding of a clients need, intended use and operator-centric methods to select the best tool or combination of tools assure a robust solution the projects containment levels. With this we can prepare a solution that protects the people within your budget and timeframe.

## Containment Tool Box-Cont.















**Compression Seal** 

High Misalignment Compensating Dock

**DownFlow** Booth

Drum Cone with Leak-Down Test

css















Split Butterfly Valve (SBV)

RABS

IBC (Bin)

Muller Seal

IBC Blender

Bag Port

LEV (Local Exhaust Ventilation)



