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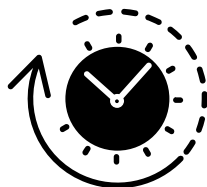
# QDS PRODUCTS

# RT Technologies

## QUICK DECON SOLUTIONS (QDS) POWDER MIX



### BENEFITS



**SIGNIFICANT  
REDUCTION IN  
CRITICAL PATH  
TIME AND DOSE**



**NON-TOXIC AND  
ENVIRONMENTALLY  
FRIENDLY**



**SIMPLE AND  
COST  
EFFECTIVE**

### Main Features

- **Safe & quick** ionic-focused solutions for removal of contamination
- Effective on **63 different radio-isotopes**
- **~80%-90% reduction** on 1st pass\*
- **Non-Toxic**, Environmentally friendly
- Testing shows combining both the Actinide & Transition Metal solution works better than using them individually
- Can be combined with a foaming agent to get longer cling time on vertical surfaces.
- Water based & **"Resin Bed friendly"**
- Cost effective + save on shipping costs!
- **Shelf Life:**
  - a. Unlimited in powder form at STP (standard temp and pressures)
  - b. Mixed with DI water - up to 60 days
  - c. Mixed with tap water - up to 24 hours

### DESCRIPTION

QDS-Powder Mix is a combination of QDA (Quick Decon Actinide) and QDTM (Quick Decon Transition Metal) that comes in powder form to mix and make custom amounts of the Quick Decon Solution. The core technology is called the "Mass Effect" influence. When our proprietary solutions are introduced to a contaminated surface, the radioactive material is lifted from the surface and suspended in the solution, where it can be easily wiped up or rinsed away as radioactive waste.

Our products are currently in use in commercial nuclear power plants, nuclear waste facilities, and hospitals. They have a proven track record of significantly reducing time and dose in critical path applications such as Cavity Decon.

### EASY APPLICATION

1. Mix the powder with DI water
2. Spray on the surface to be decontaminated
3. Let the solution penetrate the area for 1-5 minutes
4. Wipe down or rinse off with cold water
5. Remeasure surface for contamination levels
6. Repeat steps 1 - 5 if necessary

### DECONTAMINATES

**Transition Metals** such as Cobalt, Strontium, Chromium, Manganese, Iron, Zinc & Nickel

**Actinides** such as Plutonium, Uranium, Titanium, Technetium, Americium, Radium, etc.

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\*shown in independent tests. Results may vary based on surface type and source term mix



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# QDS COMBO WIPES

## Features:

- 80 - 90% Decontamination Factor
- 35 wipes per canister
- Effective on both Transition Metal and Actinide Radionuclide Isotope Families
- 10+ year shelf life of product (dry); 60+ days when distilled water is added

# EMERGENCY RAD DECON KIT

Your Emergency Survival Kit™ may consist of the following items or equivalents:

Our proprietary Quick Decon™ Mass Effect™ solutions for Radiation Decontamination. These water-based liquids come in convenient-to-use Color-Coded 32 oz. bottles with accompanying trigger sprayers (2). One Qt. For Transition Metals (BLUE LABEL) such as Cobalt, Cesium, Strontium and Thallium and one Qt. For Actinides (YELLOW LABEL) such as Uranium, Plutonium, Technetium and Radium. Our solutions are made from cosmetic-grade, FDA-approved materials and are not radioactive before use. (See Instructions for Use)



## M7 Quick Decon Rad-Wipes



### FEATURES

- REMOVES 80% -90% CONTAMINATION ON ONE PASS
- FORMULATED FOR TRANSITION METALS AND ACTINIDES
- ENVIRONMENTALLY FRIENDLY
- USE ON INTACT HUMAN SKIN AND HAIR
- COLOR CODED "A" AND "B" FOR EASE OF SELECTION
- SOLD SEPARATELY OR INCLUDED IN CUSTOM KITS
- BULK QUANTITIES AVAILABLE FOR EMERGENCY STOCKPILE
- USER-FRIENDLY, NO MIXING REQUIRED, AND LIGHTWEIGHT
- 10 YEAR SHELF LIFE • MOQ 40 PACKETS

Simple to use, easy to distribute; Use for Routine Decontamination Application or Nuclear Incident/Dirty Bomb Event.

Best for Long Term Storage, and military applications.



# Reactor Cavity Survey Results using QDS

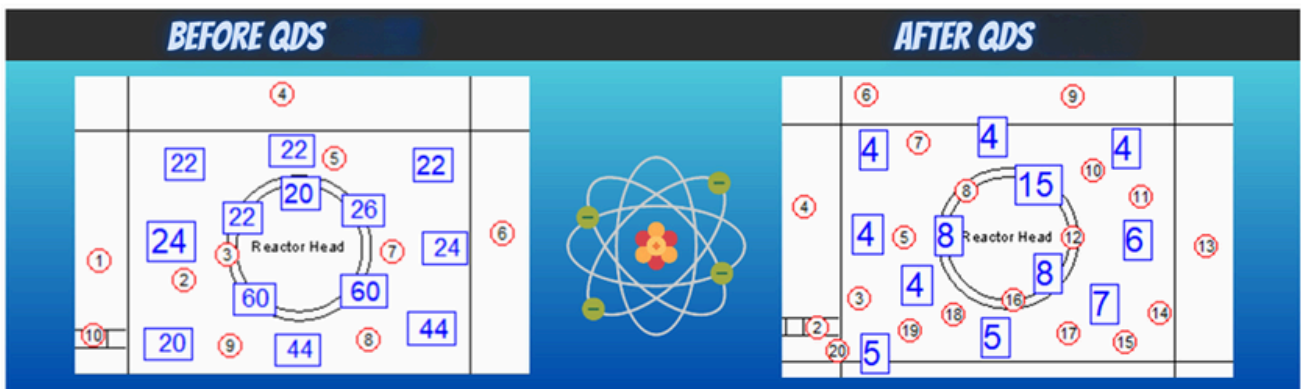
Before  
QDS

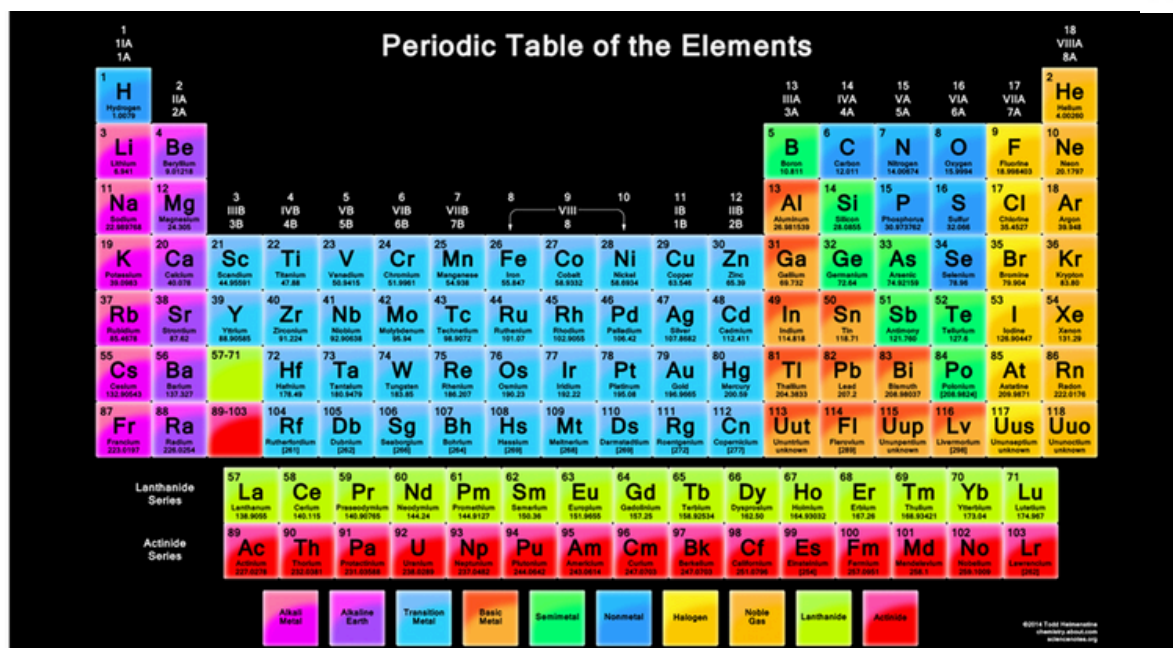
1	Smear	2	$\beta$ 1,000,000	dpm/100 cm <sup>2</sup>	WALL
		4	$\alpha$ 48.9	dpm/100 cm <sup>2</sup>	
2	Smear	2	$\beta$ 10,000,000	dpm/100 cm <sup>2</sup>	FLOOR
3	Smear	2	$\beta$ 4,000,000	dpm/100 cm <sup>2</sup>	FLANGE
4	Smear	2	$\beta$ 800,000	dpm/100 cm <sup>2</sup>	WALL
		4	$\alpha$ 23.47	dpm/100 cm <sup>2</sup>	
5	Smear	2	$\beta$ 30,000,000	dpm/100 cm <sup>2</sup>	FLOOR
6	Smear	2	$\beta$ 800,000	dpm/100 cm <sup>2</sup>	WALL
7	Smear	2	$\beta$ 12,000,000	dpm/100 cm <sup>2</sup>	FLOOR
8	Smear	2	$\beta$ 99,999,999	dpm/100 cm <sup>2</sup>	FLOOR
		4	$\alpha$ 0	dpm/100 cm <sup>2</sup>	
9	Smear	2	$\beta$ 30,000,000	dpm/100 cm <sup>2</sup>	FLOOR
10	Smear	2	$\beta$ 2,000,000	dpm/100 cm <sup>2</sup>	
		4	$\alpha$ 50.3	dpm/100 cm <sup>2</sup>	

After  
QDS

1	Smear	N/A	$\beta/\gamma$ 5K	dpm/100 cm <sup>2</sup>	LADDER
2	Smear	N/A	$\beta/\gamma$ 12K	dpm/100 cm <sup>2</sup>	LADDER
3	Smear	N/A	$\beta/\gamma$ 60K	dpm/100 cm <sup>2</sup>	
		N/A	$\alpha$ <20	dpm/100 cm <sup>2</sup>	
4	Smear	N/A	$\beta/\gamma$ 7K	dpm/100 cm <sup>2</sup>	WALL
5	Smear	N/A	$\beta/\gamma$ 15K	dpm/100 cm <sup>2</sup>	
6	Smear	N/A	$\beta/\gamma$ 10K	dpm/100 cm <sup>2</sup>	WALL
7	Smear	N/A	$\beta/\gamma$ 80K	dpm/100 cm <sup>2</sup>	
		N/A	$\alpha$ <20	dpm/100 cm <sup>2</sup>	
8	Smear	N/A	$\beta/\gamma$ 50K	dpm/100 cm <sup>2</sup>	
		N/A	$\alpha$ <20	dpm/100 cm <sup>2</sup>	
9	Smear	N/A	$\beta/\gamma$ 20K	dpm/100 cm <sup>2</sup>	WALL
10	Smear	N/A	$\beta/\gamma$ 15K	dpm/100 cm <sup>2</sup>	
11	Smear	N/A	$\beta/\gamma$ 25K	dpm/100 cm <sup>2</sup>	
12	Smear	N/A	$\beta/\gamma$ 3K	dpm/100 cm <sup>2</sup>	HEAD
13	Smear	N/A	$\beta/\gamma$ 3K	dpm/100 cm <sup>2</sup>	WALL

INSTRUMENTS USED: LUDLUM-177 FRISKER, LUDLUM-9-3 ION, LUDLUM-2000 SCALER





## QDS-Powder decontaminates BOTH Transition Metals and Actinides

TRANSITION METALS (TM)		ACTINIDES (A)			
Barium	Lithium	Actinium	Iridium	Praseodymium	Terbium
Beryllium	Magnesium	Americium	Lanthanum	Protactinium	Thorium
Calcium	Manganese	Cadmium	Lutetium	Radium	Thulium
Cesium	Nickel	Cerium	Mercury	Rhenium	Titanium
Chromium	Potassium	Dysprosium	Molybdenum	Rhodium	Tungston
Cobalt	Rubidium	Erbium	Neodymium	Ruthenium	Uranium
Copper	Sodium	Europium	Niobium	Samarium	Vanadium
Gallium	Strontium	Gadolinium	Osmium	Scandium	Ytterbium
Indium	Thallium	Gold	Palladium	Silver	Yttrium
Iron	Zinc	Hafnium	Platinum	Tantalum	Zirconium
		Holmium	Plutonium	Technetium	

Part Number	Description
QDS-POWDER	Powder Mixture. Makes 1 Gallon. Decontaminates Transition Metals and Actinides
QDS-COMBO	QDS Combo Wipes Decontaminates Transition Metals and Actinides. Canister with 35 Wipes
QDS-ERK	Emergency RadDecon Kit
QDS-M7	QDS-M7 Wipes. Box of 40 Sets (Actinides one side, Transition Metals on second side). Simple to use, easy to distribute



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