

Compound	Structural Formula
Sulfhydryls	
Cysteine	$\begin{array}{c} \text{COOH} \\ \\ \text{NH}_2\text{CHCH}_2\text{SH} \end{array}$
MEA	$\text{NH}_2\text{CHCH}_2\text{SH}$
WR-76841	$\begin{array}{c} \text{CH}_3 \quad \text{NH} \\ \quad \quad \parallel \\ \text{N} \text{ C } \text{CH}_2\text{SH} \\ \quad \quad \diagup \\ \text{CH}_3 \end{array}$
MPG	$\begin{array}{c} \text{COOH} \quad \text{OCH}_3 \\ \quad \quad \parallel \quad \\ \text{CH}_2 \quad \text{NH} \text{ C } \text{CH} \text{SH} \end{array}$
Phosphorothioates	
WR-2721	$\text{NH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{SPO}_3\text{H}_2$
WR-3689	$\text{CH}_3\text{NH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{SPO}_3\text{H}_2$
WR-159243	$\begin{array}{c} \text{NH} \\ \parallel \\ \text{Cyclopentane-CH}_2\text{-NHCCH}_2\text{SPO}_3\text{H} \end{array}$
Thiosulfonates	
WR-1607	$\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{S SO}_3\text{H}$
WR-3302	$\text{Cyclopentane-CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{S SO}_3\text{H}$

Figure 11-3. Structural formulas for selected sulfur-containing radioprotectants. All compounds are chemical analogues of cysteine and MEA.

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