

Appendix 6: MRI^{4D} Motion Contrast Solution

Contrast stock solution can be created by mixing the provided 360 mg of (MnCl₂ · 4H₂O) with 100 mL of DI Water using the provided 100mL plastic mixing jar - see **Table A**

Using **Table B** for reference, mix the indicated Volume of Stock Solution with the indicated Volume of DI water into the appropriate Phantom compartment to create the resulting Concentration.

Table A: Contrast Stock Solution

	Solute	Solvent	Solution Concentration
Stock Solution	360 mg (MnCl ₂ · 4H ₂ O)	100 mL of DI Water	1000 ppm

Table B: Contrast Solution Mixing Reference by Compartment

<u>Compartment</u>	Volume of Stock Solution (mL)	Volume of DI water (mL)	Concentration (ppm or mg/L)
Hollow Body Oval	72	7200	10
Hollow Insert - motion	9.3	930	10
Hollow Insert - Stationary	10	1000	10
Tumour Sphere	1	14.5	70

Note **Above concentrations give positive T1w tumour contrast**