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Product Data Sheet

Product Name:	Molday ION
Catalog Number:	CL-30Q02-2B
Description:	Stable aqueous suspension of iron-based superparamagnetic nanoparticles (USPIO)
Application:	MRI contrast agents used primarily for vascular imaging
Packaging:	20 ml sealed serum bottle
Volume:	20.0 ml
Weight of Iron:	30 mg Fe/ml
Mean Particle Size:	30 nm
Core:	Magnetite
Mean Core Size:	8 nm
Coating:	Dextran
Number of Particles:	~6.5E16 per g
Density:	~1.25 g/cm ³
Zeta Potential:	~ -4.8 mV
R1 (mM ⁻¹ sec ⁻¹)	36.4
R2 (mM ⁻¹ sec ⁻¹)	70.6
Blood Half-Life:	Several hours - model dependent
Functionality	Hydroxyl
Storage Buffer:	dH ₂ O
Autoclaved:	No
Long-Term Storage:	4 °C - Do not freeze!
Similar Products:	Combindex, Sinerem, Ferumoxtran-10
Expiration Date:	None

Known References:

- J Clin Invest. 2008 May;118(5):1965-73.
Proc Natl Acad Sci U S A. 2010 Jun 1;107(22):10238-43.
Int J Oncol. 2009 Oct;35(4):797-804.
Clin Exp Metastasis. 2009;26(5):403-14.
Magn Reson Med. 2010 Jun;63(6):1637-47.
NMR Biomed. 2012 Apr;25(4):498-505.
Int J Nanomedicine. 2012;7:2349-59
PLoS One. 2012;7(11):e49456.
*Science. 2017 May 19;354(6339):745-749
*Science. 2017 Aug 11;357(6351):591-595
*References that specifically used the custom 20 ml 30 mg Fe/ml bottling