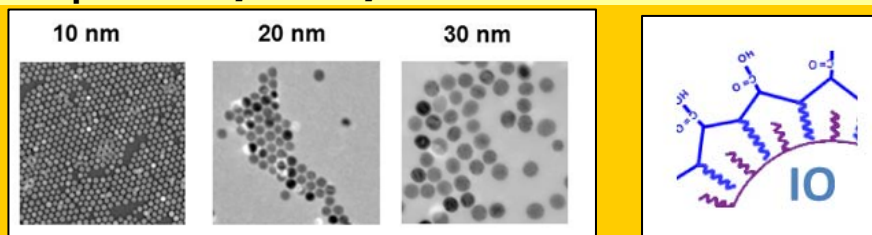


STREM Functionalized Iron Oxide Nanoparticles

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Iron oxide nanoparticles [1309-37-1]



| Catalog # | Catalog Size | in water, with carboxylic acid surface functional group* | in water, with amine surface functional group+ | in water, with PEG# | Organic solvent-dispersible (in chloroform) | Size (nm) | Overall thickness of organic layers | Zeta potential | Hydrodynamic Size* |
|-----------|---------------|--|--|---------------------|---|-----------|-------------------------------------|----------------|--------------------|
| 26-2705 | 10mg 50mg | X | | | | 10nm | 4nm | -30mV to -50mV | 8-10 nm |
| 26-2707 | 10mg 50mg | X | | | | 20nm | 4nm | -30mV to -50mV | 8-10 nm |
| 26-2709 | 10mg 50mg | X | | | | 30nm | 4nm | -30mV to -50mV | 8-10 nm |
| 26-2711 | 5mg 25mg | | X | | | 10nm | 6 nm | -10mv to +10mV | 12-14 nm |
| 26-2713 | 5mg 25mg | | X | | | 20nm | 6 nm | -10mv to +10mV | 12-14 nm |
| 26-2715 | 5mg 25mg | | X | | | 30nm | 6 nm | -10mv to +10mV | 12-14 nm |
| 26-2722 | 5mg 25mg | | | X | | 10nm | ~6nm | -10mv to 0 | 12-14nm |
| 26-2724 | 5mg 25mg | | | X | | 20nm | ~6nm | -10mv to 0 | 12-14nm |
| 26-2726 | 5mg 25mg | | | X | | 30nm | ~6nm | -10mv to 0 | 12-14nm |
| 26-2728 | 50mg 500mg | | | | X | 10nm | ~6 nm | -10mv to 0 | 12-14 nm |
| 26-2730 | 50mg 500mg | | | | X | 20nm | ~6 nm | -10mv to 0 | 12-14 nm |
| 26-2732 | 50mg 500mg | | | | X | 30nm | ~6 nm | -10mv to 0 | 12-14 nm |

* Larger than their inorganic core size measured by TEM

• The organic layers consist of a monolayer of oleic acid and a monolayer of amphiphilic polymer. Very stable in most buffer solutions in the pH range of 4-10. Solution can survive autoclaving process (121°C for 30 minutes).

+ The organic layers consist of a monolayer of oleic acid and a monolayer of amphiphilic polymer. Very stable in most buffer solutions in the pH range of 4-10. Solution can survive autoclaving process (121°C for 30 minutes). Light precipitation may occur during storage. Check expiration date before conjugation. The amine density is low due to the long PEG chain. Can be conjugated to carbonyl or thio-containing molecules.

The colloidal stability is exceptionally high. Stable in most buffer solutions in the pH range of 4-10. Solution can survive autoclaving process (121°C for 30 minutes).

References:

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Strem Chemicals, Inc.
7 Mulliken Way
Newburyport, MA 01950-4098
U.S.A.
Tel.: (978) 499-1600
Fax: (978) 465-3104
Email: info@strem.com

Strem Chemicals, Inc.
15, rue de l'Atome
Zone Industrielle
67800 BISCHHEIM France
Tel.: (33) 03 88 62 52 60
Fax: (33) 03 88 62 26 81
Email: info.europe@strem.com

Strem Chemicals, Inc.
Postfach 1215
77672 KEHL
Germany
Telefon: 0 78 51/ 7 58 79
Email: info.europe@strem.com

Strem Chemicals UK
41 Hills Road
Cambridge
England CB2 1NT
Tel.: 0845 643 7263
Fax: 0845 643 7362
Email: enquiries@strem.co.uk