



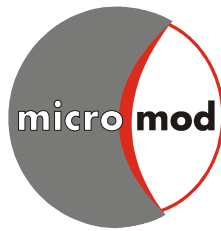
Products 2018

Fluorescent Particles

Product overview

	10 nm	100 nm	1 µm	10 µm	100 µm	Product matrix
Magnetic particles	20 nm – 500 nm					dextran
		80 nm – 100 nm				bionized nanoferrite
			2 - 12 µm			polystyrene
				30 µm - 100 µm		poly(lactic acid)
			350 nm - 6 µm			silica
			150 nm			poly(ethylene imine)
			150 nm			chitosan
	50 - 250 nm					iron oxide
Fluorescent particles	10 nm – 20 µm					silica
	25 nm – 6 µm					polystyrene, polymethacrylate
		250 nm – 100 µm				poly(lactic acid)
Fluorescent magnetic particles		250 nm				albumin
		100 nm - 300 nm				dextran
		100 nm		30 µm - 100 µm		bionized nanoferrite poly(lactic acid)
White particles	10 nm – 20 µm					silica
	25 nm – 100 µm					polystyrene, polymethacrylate
		250 nm – 100 µm				poly(lactic acid)
		300 nm				latex
		250 nm				albumin
Colored particles		100 nm – 100 µm				silica
			1 µm - 12 µm			polystyrene
		250 nm – 100 µm				poly(lactic acid)
	10 nm	100 nm	1 µm	10 µm	100 µm	

micromod Partikeltechnologie GmbH
Friedrich-Barnewitz-Straße 4, D-18119 Rostock
Tel.: +49 381/54 34 56 10, Fax: +49 381/54 34 56 20
Technical Support Tel.: +49 381/54 34 56 14
E-mail: info@micromod.de, Internet: www.micromod.de



Modern particle applications require high levels of functionality and quality with regard to substrate fixation, separation and detection. Micromod's customers are predominantly producers of diagnostic kits and high-throughput equipment, biotechnology companies, and various research institutions.

Chemical surface-functionalized and/or magnetizable polymer particles for predominantly biochemical applications take center stage in the portfolio and the development activities. The synthetic strategies designed within the company enable particle production from milliliter to bulk scale quantities depending on application. The broad range of micro- and nanoparticle products is reflected in our comprehensive catalog, which contains about 1000 items.

The major line of products are nanomag® (magnetic polysaccharide particles), micromer® (polystyrene copolymer particles) and sicastar® (silica particles). These particle types are complemented with a variety of biodegradable particles and additional highly specialized particles such as magnetic BNF-particles (Bionized NanoFerrite), which are thermally blocked at room temperature or IDA-latex particles, which possess a very high binding capacity for trace elements. Dextran based magnetic particles of the perimag® and synomag® series feature excellent properties in MRI, MPI and hyperthermia applications. For the separation of nucleic acids, nanomag®-particles are available that combine unique surface properties with a high magneto-mobility. Fluorescent sicastar® and micromer® particles are of particular interest for applications in Life Sciences due to their high fluorescence intensity and variable surface chemistry. The offered particle types are available in a broad range of particle diameters and functionalizations. Selected products can be supplied according to the cGMP requirements in coordination with the customer.

Most recent scientific findings in the area of particle technology are constantly embedded into the ongoing operations to develop customized solutions as a partner in cooperative projects with renowned domestic and foreign research institutions.

A modern quality management according to EN ISO 13485 in combination with a sophisticated particle analysis system allows the micromod Partikeltechnologie GmbH to ensure customers a high quality standard in all product categories.



Special services

- **Development and production of customized particles types**
- **Customized filling of products**
- **Surface design of custom particles**
- **Particle production under controlled hygienic conditions**
- **Coupling of antibodies, peptides, oligonucleotides and other molecules**
- **Size determination of particles**
- **Zeta potential measurement of particles**
- **Determination of AC susceptibility of magnetic particles**
- **Drying of particles on request**
- **Research samples and prototypes on request**

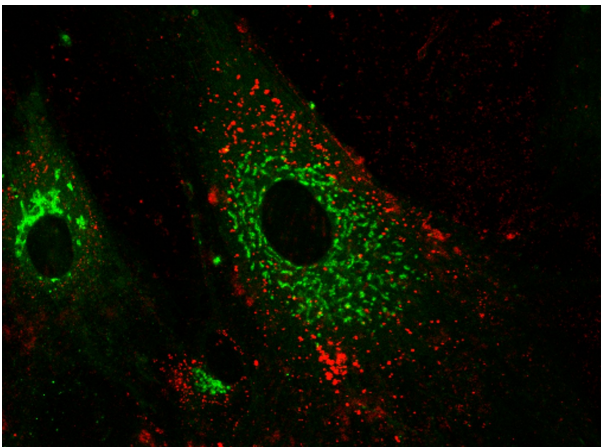
Fluorescent particles

	page
sicastar[®]-F	1
sicastar [®] -greenF	2
sicastar [®] -redF	3
sicastar [®] -blueF	4
micromer[®]-F	5
micromer [®] -greenF	
micromer [®] -redF	6
PLA-F particles	7
Albumin-F particles	8

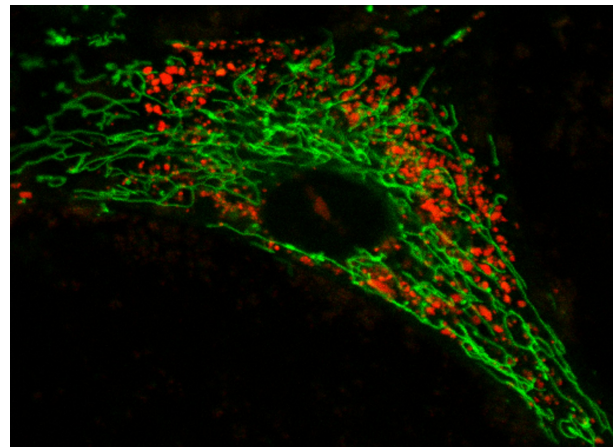
sicastar[®]-F particles are produced by hydrolysis of orthosilicates and related compounds. They contain a high amount of covalently bound fluorescence dye in the silica matrix and are extremely stable in organic solvents and buffers. No toxic effects come from the covalently bound fluorescence dyes. They are monodisperse and nonporous in the size range of 10 nm to 1.5 μm with a density of 2.0 g/cm³ and a polydispersity index < 0.2. The larger porous sicastar[®]-F particles have broader size distributions in the area of the porous silica particles with adjusted diameters between 3 and 20 μm and a density of 1.8 g/cm³.

Fluorescent silica particles (sicastar[®]-F)

- are available with red fluorescence (sicastar[®]-redF, excitation: 569 nm, emission: 585 nm), green fluorescence (sicastar[®]-greenF, excitation: 485 nm, emission: 510 nm) and blue fluorescence (sicastar[®]-blueF, excitation: 354 nm, emission: 450 nm),
- have a hydrophilic surface with terminal Si-OH-bonds (plain),
- are designed with the surface functionalities NH₂ and COOH for the covalent binding of proteins, antibodies, oligonucleotides, enzymes or other molecules,
- are available with red fluorescence and a strong hydrophobic trimethylsilyl (TMS) surface in the size range of 50 nm to 20 μm
- are often applied for detection purposes (flow cytometry, membrane checks, flow investigations).



Uptake of 100 nm plain sicastar[®]-redF particles in human mesenchymal stem cells (Golgi apparatus green coloured)



Uptake of 50 nm carboxylated sicastar[®]-redF particles in human mesenchymal stem cells (Mitochondria green coloured)

Silica particles ≥ 200 nm can easily be separated by simple sedimentation or centrifugation. sicastar[®] particles < 200 nm can be washed by SEC (size exclusion chromatography) or ultrafiltration/dialysis or can be separated by ultracentrifugation.

Silica particles with special fluorescent properties are available on request. The particles are delivered in aqueous suspension without any surfactants.

sicastar®-greenF

sicastar®-greenF particles are available in the size range of 30 nm to 20 µm with green fluorescence with an excitation at 485 nm and an emission at 510 nm.

Product code	Product name	Surface	Diameter	Solid content	Quantity
42-00-301	sicastar®-greenF	plain	30 nm	25 mg/ml	10 ml
42-00-501	sicastar®-greenF	plain	50 nm	25 mg/ml	10 ml
42-00-701	sicastar®-greenF	plain	70 nm	25 mg/ml	10 ml
42-00-102	sicastar®-greenF	plain	100 nm	50 mg/ml	10 ml
42-00-202	sicastar®-greenF	plain	200 nm	50 mg/ml	10 ml
42-00-302	sicastar®-greenF	plain	300 nm	50 mg/ml	10 ml
42-00-502	sicastar®-greenF	plain	500 nm	50 mg/ml	10 ml
42-00-103	sicastar®-greenF	plain	1 µm	50 mg/ml	10 ml
42-00-153	sicastar®-greenF	plain	1,5 µm	50 mg/ml	10 ml
42-00-303	sicastar®-greenF	plain	3 µm	50 mg/ml	10 ml
42-00-503	sicastar®-greenF	plain	5 µm	50 mg/ml	10 ml
42-00-104	sicastar®-greenF	plain	10 µm	50 mg/ml	10 ml
42-00-154	sicastar®-greenF	plain	15 µm	50 mg/ml	10 ml
42-00-204	sicastar®-greenF	plain	20 µm	50 mg/ml	10 ml
42-01-301	sicastar®-greenF	NH ₂	30 nm	25 mg/ml	10 ml
42-01-501	sicastar®-greenF	NH ₂	50 nm	25 mg/ml	10 ml
42-01-701	sicastar®-greenF	NH ₂	70 nm	25 mg/ml	10 ml
42-01-102	sicastar®-greenF	NH ₂	100 nm	25 mg/ml	10 ml
42-01-202	sicastar®-greenF	NH ₂	200 nm	25 mg/ml	10 ml
42-01-302	sicastar®-greenF	NH ₂	300 nm	50 mg/ml	10 ml
42-01-502	sicastar®-greenF	NH ₂	500 nm	50 mg/ml	10 ml
42-01-103	sicastar®-greenF	NH ₂	1 µm	50 mg/ml	10 ml
42-01-153	sicastar®-greenF	NH ₂	1,5 µm	50 mg/ml	10 ml
42-01-303	sicastar®-greenF	NH ₂	3 µm	50 mg/ml	10 ml
42-01-503	sicastar®-greenF	NH ₂	5 µm	50 mg/ml	10 ml
42-01-104	sicastar®-greenF	NH ₂	10 µm	50 mg/ml	10 ml
42-01-154	sicastar®-greenF	NH ₂	15 µm	50 mg/ml	10 ml
42-01-204	sicastar®-greenF	NH ₂	20 µm	50 mg/ml	10 ml
42-02-301	sicastar®-greenF	COOH	30 nm	25 mg/ml	10 ml
42-02-501	sicastar®-greenF	COOH	50 nm	25 mg/ml	10 ml
42-02-701	sicastar®-greenF	COOH	70 nm	25 mg/ml	10 ml
42-02-102	sicastar®-greenF	COOH	100 nm	25 mg/ml	10 ml
42-02-202	sicastar®-greenF	COOH	200 nm	25 mg/ml	10 ml
42-02-302	sicastar®-greenF	COOH	300 nm	50 mg/ml	10 ml
42-02-502	sicastar®-greenF	COOH	500 nm	50 mg/ml	10 ml
42-02-103	sicastar®-greenF	COOH	1 µm	50 mg/ml	10 ml
42-02-153	sicastar®-greenF	COOH	1,5 µm	50 mg/ml	10 ml
42-02-303	sicastar®-greenF	COOH	3 µm	50 mg/ml	10 ml
42-02-503	sicastar®-greenF	COOH	5 µm	50 mg/ml	10 ml
42-02-104	sicastar®-greenF	COOH	10 µm	50 mg/ml	10 ml
42-02-154	sicastar®-greenF	COOH	15 µm	50 mg/ml	10 ml
42-02-204	sicastar®-greenF	COOH	20 µm	50 mg/ml	10 ml

sicastar®-redF

sicastar®-redF particles are available in the size range from 10 nm to 20 µm with red fluorescence with an excitation at 569 nm and an emission at 585 nm.

Product code	Product name	Surface	Diameter	Solid content	Quantity
40-00-101	sicastar®-redF	plain	10 nm	25 mg/ml	10 ml
40-00-301	sicastar®-redF	plain	30 nm	25 mg/ml	10 ml
40-00-501	sicastar®-redF	plain	50 nm	25 mg/ml	10 ml
40-00-701	sicastar®-redF	plain	70 nm	25 mg/ml	10 ml
40-00-102	sicastar®-redF	plain	100 nm	50 mg/ml	10 ml
40-00-202	sicastar®-redF	plain	200 nm	50 mg/ml	10 ml
40-00-302	sicastar®-redF	plain	300 nm	50 mg/ml	10 ml
40-00-502	sicastar®-redF	plain	500 nm	50 mg/ml	10 ml
40-00-103	sicastar®-redF	plain	1 µm	50 mg/ml	10 ml
40-00-153	sicastar®-redF	plain	1,5 µm	50 mg/ml	10 ml
40-00-303	sicastar®-redF	plain	3 µm	50 mg/ml	10 ml
40-00-503	sicastar®-redF	plain	5 µm	50 mg/ml	10 ml
40-00-104	sicastar®-redF	plain	10 µm	50 mg/ml	10 ml
40-00-154	sicastar®-redF	plain	15 µm	50 mg/ml	10 ml
40-00-204	sicastar®-redF	plain	20 µm	50 mg/ml	10 ml
40-01-301	sicastar®-redF	NH ₂	30 nm	25 mg/ml	10 ml
40-01-501	sicastar®-redF	NH ₂	50 nm	25 mg/ml	10 ml
40-01-701	sicastar®-redF	NH ₂	70 nm	25 mg/ml	10 ml
40-01-102	sicastar®-redF	NH ₂	100 nm	25 mg/ml	10 ml
40-01-202	sicastar®-redF	NH ₂	200 nm	25 mg/ml	10 ml
40-01-302	sicastar®-redF	NH ₂	300 nm	50 mg/ml	10 ml
40-01-502	sicastar®-redF	NH ₂	500 nm	50 mg/ml	10 ml
40-01-103	sicastar®-redF	NH ₂	1 µm	50 mg/ml	10 ml
40-01-153	sicastar®-redF	NH ₂	1,5 µm	50 mg/ml	10 ml
40-01-303	sicastar®-redF	NH ₂	3 µm	50 mg/ml	10 ml
40-01-503	sicastar®-redF	NH ₂	5 µm	50 mg/ml	10 ml
40-01-104	sicastar®-redF	NH ₂	10 µm	50 mg/ml	10 ml
40-01-154	sicastar®-redF	NH ₂	15 µm	50 mg/ml	10 ml
40-01-204	sicastar®-redF	NH ₂	20 µm	50 mg/ml	10 ml
40-02-301	sicastar®-redF	COOH	30 nm	25 mg/ml	10 ml
40-02-501	sicastar®-redF	COOH	50 nm	25 mg/ml	10 ml
40-02-701	sicastar®-redF	COOH	70 nm	25 mg/ml	10 ml
40-02-102	sicastar®-redF	COOH	100 nm	25 mg/ml	10 ml
40-02-202	sicastar®-redF	COOH	200 nm	25 mg/ml	10 ml
40-02-302	sicastar®-redF	COOH	300 nm	50 mg/ml	10 ml
40-02-502	sicastar®-redF	COOH	500 nm	50 mg/ml	10 ml
40-02-103	sicastar®-redF	COOH	1 µm	50 mg/ml	10 ml
40-02-153	sicastar®-redF	COOH	1,5 µm	50 mg/ml	10 ml
40-02-303	sicastar®-redF	COOH	3 µm	50 mg/ml	10 ml
40-02-503	sicastar®-redF	COOH	5 µm	50 mg/ml	10 ml
40-02-104	sicastar®-redF	COOH	10 µm	50 mg/ml	10 ml
40-02-154	sicastar®-redF	COOH	15 µm	50 mg/ml	10 ml
40-02-204	sicastar®-redF	COOH	20 µm	50 mg/ml	10 ml

sicastar®-F

sicastar®-redF particles are also available with a strong hydrophobic trimethylsilyl (TMS) surface in the size range of 50 nm to 20 µm. These hydrophobic particles are provided as powders that allow a direct suspension of the particles in organic solvents.

Product code	Product name	Surface	Diameter	Solid content	Quantity
40-17-501	sicastar®-redF	TMS	50 nm	25 mg/ml	10 ml
40-17-102	sicastar®-redF	TMS	100 nm	25 mg/ml	10 ml
40-17-202	sicastar®-redF	TMS	200 nm	50 mg/ml	10 ml
40-17-302	sicastar®-redF	TMS	300 nm	50 mg/ml	10 ml
40-17-502	sicastar®-redF	TMS	500 nm	50 mg/ml	10 ml
40-17-103	sicastar®-redF	TMS	1 µm	50 mg/ml	10 ml
40-17-153	sicastar®-redF	TMS	1,5 µm	50 mg/ml	10 ml
40-17-303	sicastar®-redF	TMS	3 µm	50 mg/ml	10 ml
40-17-503	sicastar®-redF	TMS	5 µm	50 mg/ml	10 ml
40-17-104	sicastar®-redF	TMS	10 µm	50 mg/ml	10 ml
40-17-204	sicastar®-redF	TMS	20 µm	50 mg/ml	10 ml

sicastar®-blueF

sicastar®-blueF particles are available in the size range from 70 nm to 20 µm with blue fluorescence with an excitation at 354 nm and an emission at 450 nm.

Product code	Product name	Surface	Diameter	Solid content	Quantity
41-00-701	sicastar®-blueF	plain	70 nm	25 mg/ml	10 ml
41-00-202	sicastar®-blueF	plain	200 nm	50 mg/ml	10 ml
41-00-302	sicastar®-blueF	plain	300 nm	50 mg/ml	10 ml
41-00-502	sicastar®-blueF	plain	500 nm	50 mg/ml	10 ml
41-00-103	sicastar®-blueF	plain	1 µm	50 mg/ml	10 ml
41-01-202	sicastar®-blueF	NH ₂	200 nm	25 mg/ml	10 ml
41-01-302	sicastar®-blueF	NH ₂	300 nm	50 mg/ml	10 ml
41-01-502	sicastar®-blueF	NH ₂	500 nm	50 mg/ml	10 ml
41-01-103	sicastar®-blueF	NH ₂	1 µm	50 mg/ml	10 ml
41-01-303	sicastar®-blueF	NH ₂	3 µm	50 mg/ml	10 ml
41-01-503	sicastar®-blueF	NH ₂	5 µm	50 mg/ml	10 ml
41-01-104	sicastar®-blueF	NH ₂	10 µm	50 mg/ml	10 ml
41-01-154	sicastar®-blueF	NH ₂	15 µm	50 mg/ml	10 ml
41-01-204	sicastar®-blueF	NH ₂	20 µm	50 mg/ml	10 ml
41-02-202	sicastar®-blueF	COOH	200 nm	25 mg/ml	10 ml
41-02-302	sicastar®-blueF	COOH	300 nm	50 mg/ml	10 ml
41-02-502	sicastar®-blueF	COOH	500 nm	50 mg/ml	10 ml
41-02-103	sicastar®-blueF	COOH	1 µm	50 mg/ml	10 ml
41-02-303	sicastar®-blueF	COOH	3 µm	50 mg/ml	10 ml
41-02-503	sicastar®-blueF	COOH	5 µm	50 mg/ml	10 ml
41-02-104	sicastar®-blueF	COOH	10 µm	50 mg/ml	10 ml
41-02-154	sicastar®-blueF	COOH	15 µm	50 mg/ml	10 ml
41-02-204	sicastar®-blueF	COOH	20 µm	50 mg/ml	10 ml

micromer®-F

micromer®-F are monodisperse particles from polystyrene, substituted polystyrenes, polystyrene-co-polymers or polymethacrylates. While the 25 nm particles consist of polymethacrylate, the larger particles have a polystyrene matrix. Plain fluorescent polystyrene / polymethacrylate particles (micromer®-F) have no additional coatings or special functional groups on the surface.

Fluorescent polystyrene / polymethacrylate particles

- are designed with carboxylic acid groups (COOH) and amino groups (NH₂) on the particle surface for the covalent binding of proteins, antibodies or other molecules,
- are available with red (micromer®-redF, excitation: 552 nm, emission: 580 nm) and green (micromer®-greenF, excitation: 475 nm, emission: 510 nm) fluorescence.

The labeling with other fluorescence dyes is possible on request. micromer®-F particles are supplied in aqueous suspension without any surfactants.

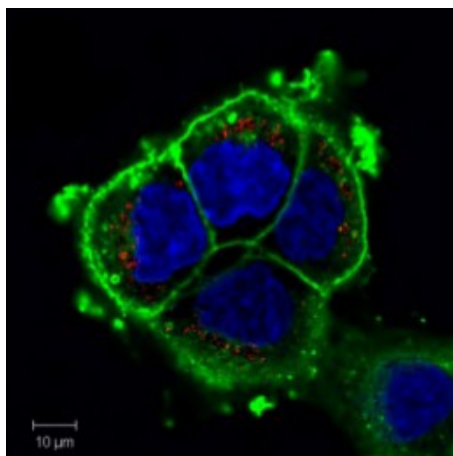
micromer®-greenF

micromer®-greenF particles are available with an encapsulated fluorescein derivative in aqueous suspension without any surfactants. The particles are provided with diameters of 25 nm, 50 nm, 100 nm and 250 nm with an excitation at 475 nm and an emission at 510 nm.

Product code	Product name	Surface	Diameter	Solid content	Quantity
29-00-251	micromer®-greenF	plain	25 nm	10 mg/ml	10 ml
29-00-501	micromer®-greenF	plain	50 nm	10 mg/ml	10 ml
29-00-102	micromer®-greenF	plain	100 nm	10 mg/ml	10 ml
29-00-252	micromer®-greenF	plain	250 nm	25 mg/ml	10 ml
29-01-251	micromer®-greenF	NH ₂	25 nm	10 mg/ml	5 ml
29-01-102	micromer®-greenF	NH ₂	100 nm	10 mg/ml	5 ml
29-01-252	micromer®-greenF	NH ₂	250 nm	25 mg/ml	5 ml
29-02-251	micromer®-greenF	COOH	25 nm	10 mg/ml	5 ml
29-02-501	micromer®-greenF	COOH	50 nm	10 mg/ml	5 ml
29-02-102	micromer®-greenF	COOH	100 nm	10 mg/ml	5 ml
29-02-252	micromer®-greenF	COOH	250 nm	25 mg/ml	5 ml

micromer®-redF

micromer®-redF particles are available with an encapsulated rhodamine derivative in aqueous suspension without any surfactants. The particles are provided in the nanoscale with diameters of 25 nm, 50 nm, 100 nm, 250 nm and in the micron-scale with 3 μm , 4 μm , 5 μm and 6 μm with an excitation at 552 nm and an emission at 580 nm.



Immunofluorescence staining of A431 cells after treatment with EG2-conjugated 25 nm micromer®-redF particles (EGFR-green, E2-conjugated particles-red, cell nucleus-blue)
(Witecy S, PhD thesis, Helmholtz-Zentrum Dresden-Rossendorf, 2012)

Product code	Product name	Surface	Diameter	Solid content	Quantity
30-00-251	micromer®-redF	plain	25 nm	10 mg/ml	10 ml
30-00-501	micromer®-redF	plain	50 nm	10 mg/ml	10 ml
30-00-102	micromer®-redF	plain	100 nm	10 mg/ml	10 ml
30-00-252	micromer®-redF	plain	250 nm	25 mg/ml	10 ml
30-01-251	micromer®-redF	NH ₂	25 nm	10 mg/ml	5 ml
30-01-102	micromer®-redF	NH ₂	100 nm	10 mg/ml	5 ml
30-01-252	micromer®-redF	NH ₂	250 nm	25 mg/ml	5 ml
30-02-251	micromer®-redF	COOH	25 nm	10 mg/ml	5 ml
30-02-501	micromer®-redF	COOH	50 nm	10 mg/ml	5 ml
30-02-102	micromer®-redF	COOH	100 nm	10 mg/ml	5 ml
30-02-252	micromer®-redF	COOH	250 nm	25 mg/ml	5 ml
30-02-303	micromer®-redF	COOH	3 μm	25 mg/ml	10 ml
30-02-403	micromer®-redF	COOH	4 μm	25 mg/ml	10 ml
30-02-503	micromer®-redF	COOH	5 μm	25 mg/ml	10 ml
30-02-603	micromer®-redF	COOH	6 μm	25 mg/ml	10 ml

PLA-F particles

The fluorescent poly(lactic acid) particles consist of poly(D,L-lactic acid) with a molecular weight of 17.000 Da. They are available with diameters of 250 nm and 500 nm in small size distributions and with mean diameters of 2 μm , 30 μm and 100 μm in broader size distributions. Plain fluorescent poly(lactic acid) particles do not have any functional groups on the surface.

Fluorescent poly(lactic acid) particles

- are designed with carboxylic acid groups (COOH) and amino groups (NH₂) on the particle surface for the covalent binding of proteins, antibodies or other molecules,
- are available with red (PLA-redF, excitation: 552 nm, emission: 580 nm) and green (PLA-greenF, excitation: 502 nm, emission: 527 nm) fluorescence.

The fluorescent poly(lactic acid) particles are supplied in water and can be loaded with drugs on request.

Product code	Product name	Surface	Diameter	Solid content	Quantity
51-00-252	PLA-greenF	plain	250 nm	10 mg/ml	5 ml
51-00-502	PLA-greenF	plain	500 nm	10 mg/ml	5 ml
51-00-203	PLA-greenF	plain	2 μm	10 mg/ml	5 ml
51-00-304	PLA-greenF	plain	30 μm	10 mg/ml	5 ml
51-00-105	PLA-greenF	plain	100 μm	10 mg/ml	5 ml
51-01-252	PLA-greenF	NH ₂	250 nm	10 mg/ml	5 ml
51-01-502	PLA-greenF	NH ₂	500 nm	10 mg/ml	5 ml
51-01-203	PLA-greenF	NH ₂	2 μm	10 mg/ml	5 ml
51-01-304	PLA-greenF	NH ₂	30 μm	10 mg/ml	5 ml
51-01-105	PLA-greenF	NH ₂	100 μm	10 mg/ml	5 ml
51-02-252	PLA-greenF	COOH	250 nm	10 mg/ml	5 ml
51-02-502	PLA-greenF	COOH	500 nm	10 mg/ml	5 ml
51-02-203	PLA-greenF	COOH	2 μm	10 mg/ml	5 ml
51-02-304	PLA-greenF	COOH	30 μm	10 mg/ml	5 ml
51-02-105	PLA-greenF	COOH	100 μm	10 mg/ml	5 ml
52-00-252	PLA-redF	plain	250 nm	10 mg/ml	5 ml
52-00-502	PLA-redF	plain	500 nm	10 mg/ml	5 ml
52-00-203	PLA-redF	plain	2 μm	10 mg/ml	5 ml
52-00-304	PLA-redF	plain	30 μm	10 mg/ml	5 ml
52-00-105	PLA-redF	plain	100 μm	10 mg/ml	5 ml
52-01-252	PLA-redF	NH ₂	250 nm	10 mg/ml	5 ml
52-01-502	PLA-redF	NH ₂	500 nm	10 mg/ml	5 ml
52-01-203	PLA-redF	NH ₂	2 μm	10 mg/ml	5 ml
52-01-304	PLA-redF	NH ₂	30 μm	10 mg/ml	5 ml
52-01-105	PLA-redF	NH ₂	100 μm	10 mg/ml	5 ml
52-02-252	PLA-redF	COOH	250 nm	10 mg/ml	5 ml
52-02-502	PLA-redF	COOH	500 nm	10 mg/ml	5 ml
52-02-203	PLA-redF	COOH	2 μm	10 mg/ml	5 ml
52-02-304	PLA-redF	COOH	30 μm	10 mg/ml	5 ml
52-02-105	PLA-redF	COOH	100 μm	10 mg/ml	5 ml

Albumin-F particles

Fluorescent albumin particles consist of cross-linked bovine serum albumin (BSA) or human serum albumin (HSA), resp., on request. They are prepared with a mean diameter of 250 nm and show a green fluorescence with an excitation at 485 nm and an emission at 510 nm. The fluorescent albumin particles are supplied in water.

Product code	Product name	Surface	Diameter	Solid content	Quantity
36-00-252	Albumin-greenF	plain	250 nm	10 mg/ml	5 ml

Order conditions

Shipping Charges

All prices listed in catalogue are FCA (Free Carrier) due to INCOTERMS 2010, these are applicable for customers using an own courier account for delivery. We normally employ courier services like UPS and +DHL for worldwide shipments under DAP conditions (Delivered At Place). Some countries imposes Entry customs clearance / Entry Taxation fees for import, these are not included.

We will add a shipment flat rate to invoice:

Germany: free ; Europe: 25 € ; USA: 60 \$; All others: 70 €.

Purchase Orders

Any offers of the micromod GmbH are exclusively directed to merchants, governmental entities or special governmental estates within the meaning of Sec. 310 para.1 BGB (German Civil Code). Orders from customers are regarded as invitations to bid. Orders can be made via e-mail (Internet) or fax. The binding contract is only concluded upon receipt of the order confirmation by micromod GmbH. All offers of the micromod GmbH are non-binding and subject to confirmation (so-called invitatio ad offerendum) unless they are expressly marked as binding or they include a particular term of acceptance. The legal relations between the micromod GmbH and the customer are solely governed by the written order confirmation, including these order terms and conditions. This represents all consideration between the parties with regard to the subject matter of the contract. We recommend to review the order confirmation and inform micromod GmbH immediately about any discrepancies.

Payments

Invoices can be paid per bank remittance (Commerzbank Germany, account number 1322262, BIC: COBADEFFXXX, IBAN: DE 08 1304 0000 0132 2262 00) or by crossed cheque. For payments with credit card (we accept VISA and MASTERCARD), please convey us the credit card number as well as the expiry date by fax at: (+49) 381 543 456 20.

Storage

We recommend storage of products according to TDS (Technical Data Sheet) and Delivery Note. Please do not freeze the products! Use slow circular shake movements to re-disperse particles. Avoid any processes that result in a foam-formation! Any liability for damages arising from an inappropriate storage is hereby disclaimed.

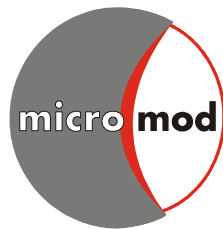
Disclaimer of Warranty and Liability

The goods delivered by micromod GmbH comply with the specifications provided in the technical data sheets. They are only intended to be used for research and development in-vitro, unless agreed upon otherwise in writing. In particular, they are not intended to be used for application as or with comestibles (foodstuffs), pharmaceuticals (drugs), cosmetics or for household or agricultural uses, respectively. The micromod GmbH assumes no liability or guarantee that the acquired products are capable for the purposes or applications assumed by the customer or for the infringement of any third party rights, in particular patent rights or any other intellectual property rights, by the use of the products, respectively.

The liability of micromod GmbH is restricted to compensation, irrespective of the legal basis, with regard to the product specifications, as they have become integral part of the contract. In particular, it does not extend to any other uses except for those agreed upon as the integral part of the contract and in particular it does not comprise any damages as a result of an inappropriate or improper storage and/or non-stipulated uses, such as the use in connection with the human body as or for comestibles (foodstuffs), medical devices, pharmaceuticals (drugs) or for household or agricultural uses, respectively.

Applicable law/Jurisdiction

The relations between the micromod GmbH and the customers are subject to the law of the Federal Republic of Germany. The United Nations Convention on Contracts for the international sale of goods of 11 April 1980 (CISG) is not applicable. Exclusive place of jurisdiction for any potential conflict arising out of the relationship between micromod GmbH and the customers or for complaints against the micromod GmbH is Rostock. Any potential compulsory statutory rules regarding exclusive places of jurisdiction are not affected by this clause.



Editor:
micromod Partikeltechnologie GmbH

Registergericht: Amtsgericht Rostock HRB 5837
Steuernummer: 4079/114/03352
Ust-Id Nr. (Vat No.): DE167349493

Compilation date - January the 10th, 2018
micromod Partikeltechnologie GmbH