

IoLiTec Nanomaterials

NEW PRODUCTS AND PRICES 2020

(valid from January 1st, 2020)



Ionic Liquids Technologies GmbH

Salzstraße 184
74076 Heilbronn
Germany

Phone: +49-(0)-7131-89839-101

Fax: +49-(0)-7131-89839-109

Email: info@nanomaterials.iolitec.de

Internet: www.nanomaterials.iolitec.de

IoLiTec: the company

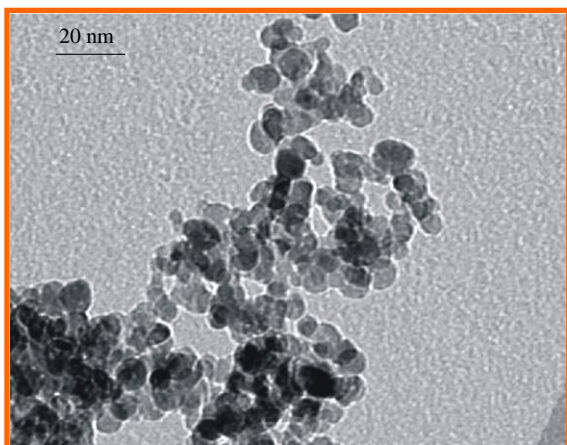
IoLiTec is an award-winning, dynamic and goal-oriented company. The main activities of IoLiTec concern the production and sale of ionic liquids and nanomaterials as well as R&D services dealing with the use of these innovative materials in new applications.

On its site in Heilbronn, IoLiTec operates 700 m² of laboratory and office space with well-equipped research and production facilities. With solid experience in project management and its skilled management team of eight PhD chemists with different professional backgrounds, IoLiTec is in the strong position to give scientifically sound answers and to deal with customer requests from many different sectors in a professional, efficient and goal-oriented way. IoLiTec's services include consulting and feasibility studies as well as the development of marketable products and applications based on ionic liquids, nanomaterials or the combination of both in new technologies. The use of ionic liquids in nanomaterial technologies has already shown important advantages in the last years and is still being investigated by universities and industry.



As an innovative company, IoLiTec is also active in this field.

Among the possible applications in nanotechnology, ionic liquids are known to act as a template for the synthesis of porous nanomaterials through their preorganized structure. Ionic liquids can also be used as a solvent and stabilizer for the preparation of inorganic nanoparticles, enabling the control of particles size growth. They can also be utilized as dispersion media for nanoparticles or as solvent for electrodeposition of nanocrystalline films of a wide range of metals that cannot be electrodeposited from aqueous solutions. IoLiTec pursues internal and external R&D projects concerning these subjects. The expertise of IoLiTec is complemented by the company's close collaborations with various institutes of the Fraunhofer Gesellschaft and a number of leading research groups at universities in Germany and abroad.



Next to R&D services, IoLiTec offers high quality nanomaterials at very competitive prices. The available products can be classified in metals, metal oxides, metal nitrides and carbides as well as carbon based nanoparticles as listed in the present catalogue. Our R&D services also include the study and preparation of nanoparticle dispersions.

Trading units

IoLiTec offers its products in standard quantities. Trading units other than those given in this publication are not available. If you wish to purchase any product in bulk quantity, please feel free to contact us for a quotation.

Prices

All prices listed in this publication are net prices and given in Euro (€). Shipping and handling charges are to be added to your account (see below). Any additional taxes and duties are payable by the customer.

Prices are subject to change. Please contact us for a firm quotation. All previously published price information will become void after December 30th, 2019.

Shipping and handling charges

Germany:

Shipments are routinely made by **trans-o-flex** (www.trans-o-flex.de). A handling charge of € 16.50 applies for all orders under € 250.00. Orders over € 250.00 are free of charge.

All other destinations:

Shipments are routinely made by **FedEx** (www.fedex.com). Shipping and handling charges apply. These depend on the destination as well as on the actual gross weight of the shipment and therefore have to be determined individually. Alternatively, shipment can be arranged through any other courier service of your choice. Please provide your account number with your preferred courier service when ordering.

Please note that not all products listed in this publication are on-stock items and may therefore have longer delivery times.

According to export regulations several products are undeliverable in several countries.

Payment

Payment is possible by bank transfer or cheque only. Credit cards are not accepted. Terms of payment are stated on your quotation and/or purchase order confirmation. All deliveries are subject to our *General Terms and Conditions* which can be found on our website (www.nanomaterials.iolitec.de).

Can't find the product you need?

If you wish to purchase a product that is not listed in this publication please do not hesitate to contact us. We offer custom synthesis of many nano particles at very competitive prices.

Your suggestions for new products are always welcome!

How to place an order

Orders should state clearly the name, number and quantity of each product you wish to purchase as well as your VAT-ID number. Please send you orders by email to

order@nanomaterials.iolitec.de

order@nanomaterials.iolitec.com

or by fax to

+49-(0)7131-89839-109


Orders by email are preferred. You will receive a purchase order confirmation by email or fax within 48 hours of receipt of your order. Please let us know if you do not receive a purchase order confirmation within this time.


Contents


FAQ	2
Metal oxides	5
Nitrides and carbides	12
Metals	15
Fullerenes	19
Carbon nano tubes (CNT)	23
Graphite and graphene	25
Dispersions	27


Abbreviations


APS	Average Particle Size
L	Length
OD	Outer Diameter
PM	Particle Morphology
SSA	Specific Surface Area
GS	Grain Size
SWCNT	Single-Walled Carbon Nanotubes
DWCNT	Double-Walled Carbon Nanotubes
MWCNT	Multi-Walled Carbon Nanotubes
TG	Technical Grade ($\leq 90\%$)
SG	Standard Grade (90% - 99%)
HP	Higher Purity ($\geq 99\%$)
UP	Upper Purity ($> 99.5\%$)


α-Aluminium oxide powder, 99+%			
NO-0003-HP	[1344-28-1]	Al ₂ O ₃	MW 101.96
APS: 80 nm		25 g	29.00 €
SSA: > 15 m ² /g		100 g	49.00 €
PM: nearly spherical		500 g	155.00 €
Appearance: white powder		1 kg	239.00 €
	Warning		
Packaging: Powder in PE bottle			


α-Aluminium oxide powder, 99.9%			
NO-0050-UP	[1344-28-1]	Al ₂ O ₃	MW 101.96
APS: 200 nm		25 g	29.00 €
SSA: 3.9 m ² /g		100 g	49.00 €
PM: spherical		500 g	155.00 €
Appearance: white powder		1 kg	229.00 €
	Warning		
Packaging: Powder in PE bottle			


γ-Aluminium oxide powder, 99.9%			
NO-0005-UP	[1344-28-1]	Al ₂ O ₃	MW 101.96
APS: < 50 nm		25 g	29.00 €
SSA: >200 m ² /g		100 g	49.00 €
PM: needles		500 g	159.00 €
Appearance: white powder		1 kg	279.00 €
	Warning		
Packaging: Powder in PE bottle			

γ-Aluminium oxide powder, 99.9%			
NO-0057-UP	[1344-28-1]	Al ₂ O ₃	MW 101.96
APS: 5 nm			
SSA: >300 m ² /g			
PM: fibrous			discontinued
Appearance: white powder			
	Warning		
Packaging: Powder in PE bottle			

α-Aluminium oxide powder, 99.85%			
NO-0008-HP	[1344-28-1]	Al ₂ O ₃	MW 101.96
GS: 40 nm	APS: 150 nm	25 g	19.00 €
SSA: 10 m ² /g		100 g	29.00 €
PM: -		500 g	109.00 €
Appearance: white powder		1 kg	159.00 €
	Warning		
Packaging: Powder in PE bottle			

α-Aluminium oxide powder, 99.5%			
NO-0072-HP	[1344-28-1]	Al ₂ O ₃	MW 101.96
APS: 40 nm		25 g	39.00 €
SSA: -		100 g	69.00 €
PM: nearly spherical		500 g	199.00 €
Appearance: white powder		1 kg	375.00 €
	Warning		
Packaging: Powder in PE bottle			


γ-Aluminium oxide powder, 99+%,			
NO-0036-HP	[1344-28-1]	Al ₂ O ₃	MW 101.96
APS: 20 nm		25 g	25.00 €
SSA:< 200 m ² /g		100 g	49.00 €
PM: spherical		500 g	159.00 €
Appearance: white powder		1 kg	249.00 €
	Warning		
Packaging: Powder in PE bottle			

Antimony(III)oxide powder, 99.5%			
NO-0010-HP	[1309-64-4]	Sb ₂ O ₃	MW 291.52
APS: 90-210 nm		25 g	35.00 €
SSA: 15.6 m²/g		100 g	99.00 €
PM: spherical		500 g	319.00 €
Appearance: white powder		1 kg	589.00 €
	Warning, UN1549, 6.1, PG III		
Packaging: Powder in PE bottle			

ATO (Antimony Tin Oxide), 99.95%

NO-0047-UP	[1309-64-4]/ [18282-10-5]	Sb ₂ O ₃ :SnO ₂ 1:9	MW~164.79
------------	------------------------------	---	-----------

APS: 100 nm	25 g	39.00 €
SSA: -	100 g	59.00 €
Sb ₂ O ₃ :SnO ₂ (1:9 in weight)	500 g	229.00 €
Appearance: -	1 kg	349.00 €


 Warning, **UN1549, 6.1, PG III**

Packaging: Powder in PE bottle

Barium titanate powder, 99.95%

NO-0073-UP	[12047-27-7]	BaTiO ₃	MW 233.19
------------	--------------	--------------------	-----------

APS: 50 nm	25 g	29.00 €
SSA: ~20 m ² /g	100 g	59.00 €
PM: cubic	500 g	159.00 €
Appearance: white powder	1 kg	349.00 €


 Warning

Packaging: Powder in PE bottle

ATO (Antimony Tin Oxide), 99.95%

NO-0060-UP	[1309-64-4]/ [18282-10-5]	ATO	MW~164.79
------------	------------------------------	-----	-----------

APS: 10-20 nm	25 g	39.00 €
SSA: -	100 g	79.00 €
Sb ₂ O ₃ :SnO ₂ (10:90 in weight)	500 g	299.00 €
Appearance: -	1 kg	459.00 €


 Warning, **UN1549, 6.1, PG III**

Packaging: Powder in PE bottle

Cerium(IV)oxide powder, 99.9%

NO-0029-UP	[1306-38-3]	CeO ₂	MW 172.12
------------	-------------	------------------	-----------

APS: 15-30 nm		
SSA: 30-50 m ² /g		
PM: spherical		Price available on request
Appearance: pale yellow powder		



 Warning

Packaging: Powder in PE bottle

Aluminium-doped Zinc oxide, 99.9%

NO-0061-UP	[37275-76-6]	AZO	MW~81.80
------------	--------------	-----	----------

APS: 20-40 nm	25 g	69.00 €
(ZnO >98% Al ₂ O ₃ <2%)	100 g	199.00 €
Appearance: white powder	500 g	699.00 €
	1 kg	1199.00 €


  Warning, **UN3077, 9, PG III**

Packaging: Powder in PE bottle

Chromium(III)oxide powder, 99+%

NO-0018-HP	[1308-38-9]	Cr ₂ O ₃	MW 151.99
------------	-------------	--------------------------------	-----------

APS: 60 nm	25 g	45.00 €
SSA: -	50 g	59.00 €
PM: ~ spherical	100 g	125.00 €
Appearance: green powder	500 g	449.00 €


 Warning

Packaging: Powder in PE bottle

Barium titanate powder, 99.95%

NO-0041-UP	[12047-27-7]	BaTiO ₃	MW 233.19
------------	--------------	--------------------	-----------

APS: 100 nm	25 g	29.00 €
SSA: > 10 m ² /g	100 g	45.00 €
PM: cubic	500 g	119.00 €
Appearance: white powder	1 kg	229.00 €



 Warning

Packaging: Powder in PE bottle


Cobalt(II,III)oxide powder, 99.8%


NO-0002-UP	[1308-06-1]	Co ₃ O ₄	MW 240.80
------------	-------------	--------------------------------	-----------

APS: ~30 nm	25 g	25.00 €
SSA: >40 m ² /g	100 g	49.00 €
PM: -	500 g	239.00 €
Appearance: black powder	1 kg	399.00 €


  Warning,


Packaging: Powder in PE bottle


Copper(II)oxide powder, 99.9%			
NO-0031-HP	[1317-38-0]	CuO	MW 79.55
APS: 40 nm	25 g	39.00 €	
SSA: -	100 g	69.00 €	
PM: -	500 g	239.00 €	
Appearance: black powder	1 kg	389.00 €	
 Warning, UN3077, 9, PG III			
Packaging: Powder in PE bottle			


Gadolinium(III)oxide powder, 99.9%			
NO-0022-UP	[12064-62-9]	Gd ₂ O ₃	MW 362.50
APS: 20-80 nm			
SSA: 10-40 m ² /g			
PM: ~ spherical			Price available on request
Appearance: white powder			
 Warning			
Packaging: Powder in PE bottle			


Dysprosium(III)oxide powder, 99.9%			
NO-0019-UP	[1308-87-8]	Dy ₂ O ₃	MW 373.00
APS: 55 nm			
SSA: ~ 20 m ² /g			
PM: spherical			Price available on request
Appearance: white powder			
Packaging: Powder in PE bottle			


Gadolinium(III)oxide powder, 99.9%			
NO-0044-UP	[12064-62-9]	Gd ₂ O ₃	MW 362.50
APS: 15-30 nm			
SSA: 30-50 m ² /g			
PM: -			Price available on request
Appearance: white powder			
 Warning			
Packaging: Powder in PE bottle			


Erbium(III)oxide powder, 99.9%			
NO-0020-UP	[12061-16-4]	Er ₂ O ₃	MW 382.52
APS: 43 nm			
SSA: 16 m ² /g			
PM: ~ spherical			Price available on request
Appearance: pink powder			
 Warning			
Packaging: Powder in PE bottle			


Hafnium(IV)oxide powder, 99.9%			
NO-0062-UP	[12055-23-1]	HfO ₂	MW 210.49
APS: 61-80 nm			
SSA: -			
PM: nearly spherical			Price available on request
Appearance: white powder			
 Warning			
Packaging: Powder in PE bottle			


Europium(III)oxide powder, 99.99%			
NO-0021-UP	[1308-96-9]	Eu ₂ O ₃	MW 351.93
APS: 45 - 58 nm			
SSA: 14 - 18 m ² /g			
PM: spherical			Price available on request
Appearance: white powder			
 Warning			
Packaging: Powder in PE bottle			


Indium(III)oxide powder, 99.99%			
NO-0023-UP	[1312-43-2]	In ₂ O ₃	MW 277.63
APS: 30-70 nm	10 g	55.00 €	
SSA: 10-20 m ² /g	25 g	119.00 €	
PM: -	50 g	199.00 €	
Appearance: pale yellow powder	100 g	299.00 €	
 Warning			
Packaging: Powder in PE bottle			


Iron(II,III)oxide powder, 98+%, Magnetite			
NO-0049-SG	[1317-61-9]	Fe ₃ O ₄	MW 231.53
APS: 20-30 nm	25 g	49.00 €	
SSA: 40-60 m ² /g	100 g	119.00 €	
PM: spherical	500 g	489.00 €	
Appearance: brown powder	1 kg	699.00 €	
 Warning			
Packaging: Powder in PE bottle			


α-Iron(III)oxide powder, 99.5%, Hämatite			
NO-0055-HP	[1309-37-1]	Fe ₂ O ₃	MW 159.69
APS: 20-40 nm	25 g	39.00 €	
SSA: 40-60 m ² /g	100 g	89.00 €	
Appearance: red powder	500 g	329.00 €	
	1 kg	549.00 €	
 Warning			
Packaging: Powder in PE bottle			


Iron(II,III)oxide powder, 98+%, Magnetite			
CS	[1317-61-9]	Fe ₃ O ₄	MW 231.53
APS: 38-44 nm			
SSA: ~60 m ² /g			
PM: spherical			
Appearance: brown powder			
 Warning			
Packaging: Powder in PE bottle			

γ-Iron(III)oxide powder, 99%, Maghemite			
NO-0053-HP	[1309-37-1]	Fe ₂ O ₃	MW 159.69
APS: 20-40 nm	25 g	39.00 €	
SSA: 40-60 m ² /g	100 g	79.00 €	
PM: spherical	500 g	259.00 €	
Appearance: red brown powder	1 kg	429.00 €	
 Warning			
Packaging: Powder in PE bottle			


Iron(II,III)oxide powder, 98+%, Magnetite coated with SiO₂			
CS	[1317-61-9]	Fe ₃ O ₄	MW 231.53
APS: 38-44 nm (Magnetit core)			
SSA: 40-60 m ² /g			
PM: spherical		Price available on request	
Appearance: brown powder			
 Warning			
Packaging: Powder in PE bottle			

ITO Indium Tin Oxide, 99.99%			
NO-0045-UP	[50926-11-9]	In ₂ O ₃ :SnO ₂	MW~264.94
APS: 30-70 nm	10 g	59.00 €	
In ₂ O ₃ :SnO ₂ (9:1)	25 g	119.00 €	
SSA: 20-25 m ² /g	50 g	199.00 €	
Appearance: white powder	100 g	299.00 €	
 Warning			
Packaging: Powder in PE bottle			

Iron(II,III)oxide powder, 98+%, Magnetite coated with SiO₂ and functionalized			
CS	[1317-61-9]	Fe ₃ O ₄	MW 231.53
APS: 38-44 nm (Magnetit core)			
SSA: 40-60 m ² /g			
PM: spherical		Price available on request	
Appearance: brown powder			
 Warning			
Packaging: Powder in PE bottle			

Lanthanum oxide powder, 99.99%			
NO-0042-UP	[1312-81-8]	La ₂ O ₃	MW 325.81
APS: 15 – 30 nm			
SSA: 20 – 40 m ² /g			
Appearance: white powder		Price available on request	
 Warning			
Packaging: Powder in PE bottle			


Magnesium oxide powder, 99.9%			
NO-0012-UP	[1309-48-4]	MgO	MW 40.30
APS: 35 nm	25 g	29.00 €	
SSA: >50 m ² /g	100 g	49.00 €	
Appearance: white powder	500 g	149.00 €	
	1 kg	239.00 €	
Packaging: Powder in PE bottle			


Nickel(II)oxide, 99.5%			
NO-0026-HP	[1313-99-1]	NiO	MW 74.69
APS: ~ 20 nm	25 g	35.00 €	
SSA: >50 m ² /g	100 g	89.00 €	
Appearance: black powder	500 g	349.00 €	
	1 kg	589.00 €	
 Danger			
Packaging: Powder in PE bottle			


Magnesium oxide powder, 99.9%+Stearic Acid			
NO-0048-HP	[1309-48-4]	MgO+C ₁₈ H ₃₆ O ₂	
APS: 10-30 nm	25 g	39.00 €	
SSA: >20 m ² /g	50 g	65.00 €	
Appearance: white powder	100 g	119.00 €	
	500 g	439.00 €	
	1 kg	699.00 €	
Packaging: Powder in PE bottle			


Samarium(III)oxide, 99.9%			
NO-0028-UP	[12060-58-1]	Sm ₂ O ₃	MW 348.72
APS: 30-50 nm	25 g	29.00 €	
SSA: 12-20 m ² /g	100 g	69.00 €	
Appearance: white/pale yellow powder	500 g	259.00 €	
Packaging: Powder in PE bottle			


Manganese oxide powder, 98+%			
NO-0070-HP	[1317-34-6]	Mn ₂ O ₃	MW 157.87
APS: 40-60 nm	10 g	55.00 €	
SSA: - m ² /g	25 g	99.00 €	
Appearance: black powder	50 g	189.00 €	
	100 g	269.00 €	
Packaging: Powder in PE bottle			


Silicon oxide, 99.9% (amorphous)			
NO-0034-UP	[7631-86-9]	SiO ₂	MW 60.08
APS: 20-60 nm	25 g	29.00 €	
SSA: 400-600 m ² /g	100 g	55.00 €	
PM: spherical	500 g	209.00 €	
Appearance: white powder	1 kg	349.00 €	
 Warning			
Packaging: Powder in PE bottle			


Neodymium(III)oxide, 99.9%			
NO-0025-UP	[1313-97-9]	Nd ₂ O ₃	MW 336.48
APS: ~80 nm	25 g	49.00 €	
SSA: 8-12 m ² /g	100 g	119.00 €	
Appearance: light blue	500 g	499.00 €	
	1 kg	759.00 €	
 Warning			
Packaging: Powder in PE bottle			


Silicon oxide, 99+%			
NO-0040-HP	[7631-86-9]	SiO ₂	MW 60.08
APS: 10-20 nm	25 g	29.00 €	
SSA: 600 m ² /g	100 g	49.00 €	
Appearance: white powder	500 g	189.00 €	
	1 kg	329.00 €	
 Warning			
Packaging: Powder in PE bottle			


Silicon oxide, 99.5% (non porous)			
NO-0071-HP	[7631-86-9]	SiO ₂	MW 60.08
APS: 15-20 nm		25 g	29.00 €
SSA: 160 m²/g		50 g	55.00 €
PM: spherical		100 g	80.00 €
Appearance: white powder		500 g	329.00 €
		1 kg	599.00 €
	Warning		
Packaging: Powder in PE bottle			


Silicon oxide + double bond, 99.8%		
CS	[7631-86-9]	SiO ₂
APS: 10-20 nm		
SSA: 90-130 m ² /g		
Appearance: white powder		Price available on request
	Warning	
Packaging: Powder in PE bottle		


Silicon oxide, 99.5% (porous)			
CS	[7631-86-9]	SiO ₂	MW 60.08
APS: 15-20 nm			
SSA: >600 m ² /g			
PM: spherical			
Appearance: white powder		Price available on request	
	Warning		
Packaging: Powder in PE bottle			


Silicon oxide + methacrylate group, 99.8%		
CS	[7631-86-9]	SiO ₂
APS: 20 nm		
SSA: 90-130 m ² /g		
Appearance: white powder		Price available on request
	Warning	
Packaging: Powder in PE bottle		


Silicon oxide + amino group, (6:1), 99.8%			
NO-0056-HP	[7631-86-9]	SiO ₂ +NH ₂	
APS: 10-20 nm		10 g	29.00 €
SSA: 90-130 m ² /g		25 g	65.00 €
Appearance: white powder		50 g	105.00 €
		100 g	169.00 €
		500 g	559.00 €
	Warning		
Packaging: Powder in PE bottle			


Strontium titanate powder, 99.9%			
NO-0043-UP	[12060-59-2]	SrTiO ₃	MW 183.50
APS: ~100 nm	25 g	25.00 €	
SSA: > 10 m ² /g	100 g	45.00 €	
PM: ~spherical	500 g	169.00 €	
Appearance: white grey	1 kg	219.00 €	
			
Packaging: Powder in PE bottle			


Silicon oxide + epoxid group, 99.8%			
CS	[7631-86-9]	SiO ₂ +NH ₂	
APS: 10-20 nm			
SSA: 90-130 m ² /g			
Appearance: white powder		Price available on request	
	Warning		
Packaging: Powder in PE bottle			


Tin(IV)oxide, 99.9%			
NO-0009-UP	[18282-10-5]	SnO ₂	MW 150.71
APS: ~100 nm	25 g	29.00 €	
SSA: ~11 m ² /g	50 g	49.00 €	
Appearance: white powder	100 g	79.00 €	
	500 g	275.00 €	
	1 kg	449.00 €	
			
Packaging: Powder in PE bottle			


Titanium(IV)oxide (rutile), 99%			
NO-0051-HP	[1317-80-2]	TiO ₂	MW 79.87
APS: 200 nm		25 g	19.00 €
SSA: 8m ² /g		100 g	39.00 €
PM: nearly spherical		500 g	69.00 €
Appearance: white powder		1 kg	99.00 €
 Warning			
Packaging: Powder in PE bottle			


Titanium(IV)oxide (rutile), coated with Silicon Oil, 99%			
NO-0065-HP	[1317-80-2]	TiO ₂	MW 79.87
APS: 20-40 nm		25 g	49.00 €
SSA: 40 m ² /g		100 g	119.00 €
Appearance: white powder		500 g	359.00 €
		1 kg	599.00 €
 Warning			
Packaging: Powder in PE bottle			


Titanium(IV)oxide (anatase), 99.5%			
NO-0038-HP	[1317-70-0]	TiO ₂	MW 79.87
APS: 20 nm		25 g	29.00 €
SSA: >120 m ² /g		100 g	49.00 €
Appearance: white powder		500 g	195.00 €
		1 kg	275.00 €
 Warning			
Packaging: Powder in PE bottle			

Titanium(IV)oxide (rutile), coated with SiO₂, 99%, hydrophobic			
NO-0066-HP	[1317-80-2]	TiO ₂	MW 79.87
APS: 20-40 nm		25 g	49.00 €
SSA: >40 m ² /g		100 g	109.00 €
Appearance: white powder		500 g	399.00 €
		1 kg	659.00 €
 Warning			
Packaging: Powder in PE bottle			

Titanium(IV)oxide (rutile), 99.5%			
NO-0046-HP	[1317-80-2]	TiO ₂	MW 79.87
APS: 10-30 nm		25 g	29.00 €
SSA: ~ 50 m ² /g		100 g	59.00 €
Appearance: white powder		500 g	229.00 €
		1 kg	355.00 €
 Warning			
Packaging: Powder in PE bottle			

Yttrium(III)oxide, 99.95%			
NO-0030-UP	[1314-36-9]	Y ₂ O ₃	MW 225.81
APS: 30-50 nm		25 g	35.00 €
SSA: 30-50 m ² /g		100 g	59.00 €
Appearance: white powder		500 g	269.00 €
		1 kg	429.00 €
 Warning			
Packaging: Powder in PE bottle			

Titanium(IV)oxide (anatase), 99.5%			
NO-0058-HP	[1317-70-0]	TiO ₂	MW 79.87
APS: 10-25 nm		25 g	29.00 €
SSA: 50-150 m ² /g		100 g	59.00 €
Appearance: white powder		500 g	219.00 €
		1 kg	345.00 €
 Warning			
Packaging: Powder in PE bottle			

Zinc oxide, 99.5%			
NO-0011-HP	[1314-13-2]	ZnO	MW 81.39
APS: 20 nm		25 g	39.00 €
SSA: 50 m ² /g		50 g	59.00 €
PM: nearly spherical		100 g	95.00 €
Appearance: white powder		500 g	309.00 €
		1 kg	529.00 €
 Warning, UN3077, 9, PG III			
Packaging: Powder in PE bottle			

Zinc oxide, 99.9%

NO-0039-UP [1314-13-2] ZnO MW 81.39

APS: 90-210 nm	25 g	29.00 €
SSA: 5-7 m ² /g	100 g	59.00 €
PM: irregular	500 g	249.00 €
Appearance: white powder	1 kg	349.00 €



Warning, **UN3077, 9, PG III**

Packaging: Powder in PE bottle

Zirconium(IV)oxide, 99.9%

NO-0013-UP [1314-23-4] ZrO₂ MW 123.22

APS: 20-30nm	25 g	29.00 €
SSA: >35 m ² /g	100 g	99.00 €
PM: sperical	500 g	335.00 €
Appearance: white powder	1 kg	569.00 €



Warning

Packaging: Powder in PE bottle

Neodymium(III)oxide, 99.9%


RE-0001-UP [1313-97-9] Nd₂O₃ MW 336.48


APS: µm-powder	25 g	45.00 €
SSA: -	100 g	129.00 €
Appearance: light blue	500 g	499.00 €
	1 kg	759.00 €





Warning


Packaging: Powder in PE bottle


Aluminium(III)nitride, 99%			
NC-0001-HP	[24304-00-5]	AlN	MW 40.99
APS: 40-50 nm	10 g	35.00 €	
SSA: 78 m ² /g	25 g	69.00 €	
PM: spherical	50 g	109.00 €	
Appearance: white powder	100 g	179.00 €	
	500 g	659.00 €	
 Warning, UN2813; 4.3; PG III			
Packaging: Powder in PE bottle			


Boron carbide, 99%			
NC-0015-HP	[12069-32-8]	B ₄ C	MW 55.26
APS: <50 nm	5 g	49.00 €	
SSA: >75 m ² /g	10 g	79.00 €	
PM: Monocrystalline	25 g	159.00 €	
Appearance: Grey Black	50 g	245.00 €	
	100 g	459.00 €	
 Warning			
Packaging: Powder in PE bottle			


Aluminium(III)nitride, 99%			
NC-0010-HP	[24304-00-5]	AlN	MW 40.99
APS: 50 nm	10 g	29.00 €	
SSA: 75 m ² /g	25 g	55.00 €	
PM : spherical	50 g	89.00 €	
Appearance: white powder	100 g	149.00 €	
	500 g	479.00 €	
 Warning, UN2813; 4.3; PG III			
Packaging: Powder in PE bottle			


Molybdenum(IV)disulfide, 99%			
NC-0017-HP	[1317-33-5]	MoS ₂	MW 160.07
APS: 90 nm	10 g	109.00 €	
SSA: 35 m ² /g	25 g	185.00 €	
PM: nearly sperical	50 g	345.00 €	
Appearance: black powder	100 g	599.00 €	
 Warning			
Packaging: Powder in PE bottle			


Boron nitride, 99%			
NC-0007-HP	[10043-11-5]	BN	MW 24.82
APS: 137 nm	5 g	49.00 €	
SSA: 19.4 m ² /g	10 g	79.00 €	
Crystalline form: hexagonal	25 g	179.00 €	
Appearance: white powder			
 Warning			
Packaging: Powder in PE bottle			


Silicon(IV)carbide (beta), 99%			
NC-0002-HP	[409-21-2]	SiC	MW 40.10
APS: 60 nm	10 g	29.00 €	
SSA: 30 m ² /g	25 g	45.00 €	
PM: spherical	50 g	89.00 €	
Appearance: grey powder	100 g	139.00 €	
	500 g	549.00 €	
 Warning			
Packaging: Powder in PE bottle			


Boron nitride, 99%			
NC-0018-HP	[10043-11-5]	BN	MW 24.82
APS: 70 nm	5 g	19.00 €	
SSA: 19.4 m ² /g	10 g	25.00 €	
Crystalline form: hexagonal	25 g	49.00 €	
Appearance: white powder	50 g	75.00 €	
	100 g	129.00 €	
 Warning			
Packaging: Powder in PE bottle			


Silicon(IV)carbide (beta), 99%			
NC-0008-HP	[409-21-2]	SiC	MW 40.10
APS: 50-60 nm	10 g	29.00 €	
SSA: >90 m ² /g	25 g	49.00 €	
PM: spherical	50 g	79.00 €	
Appearance: greyish powder	100 g	139.00 €	
	500 g	479.00 €	
 Warning			
Packaging: Powder in PE bottle			


Silicon(IV)nitride (amorphous), 99%			
NC-0009-HP	[12033-89-5]	Si ₃ N ₄	MW 140.28
APS: 15-20 nm		25 g	39.00 €
SSA: 103-123 m ² /g		50 g	69.00 €
PM: spherical		100 g	109.00 €
Appearance: white or yellow powder		500 g	429.00 €
	Warning		
Packaging: Powder in PE bottle			


Titanium(III)nitride, 97%			
NC-0005-SG	[25583-20-4]	TiN	MW 61.87
APS: 20 nm		10 g	29.00 €
SSA: 80 m²/g		25 g	65.00 €
PM: spherical		50 g	109.00 €
Appearance: black powder		100 g	179.00 €
		500 g	699.00 €
	Danger, UN3178; 4.1; PG III		
Packaging: Powder in PE bottle			


Silicon(IV)nitride (amorphous), 99%			
NC-0003-HP	[12033-89-5]	Si ₃ N ₄	MW 140.28
APS: 20 nm		25 g	29.00 €
SSA: 50 m²/g		50 g	49.00 €
PM: spherical		100 g	75.00 €
Appearance: white powder		500 g	289.00 €
	Warning		
Packaging: Powder in PE bottle			

Titanium(III)nitride, 99%			
NC-0012-HP	[25583-20-4]	TiN	MW 61.87
APS: 14 nm		10 g	39.00 €
SSA: > 80 m²/g		25 g	85.00 €
PM: spherical		50 g	139.00 €
Appearance: black powder		100 g	209.00 €
		500 g	839.00 €
	Danger, UN3178; 4.1; PG III		
Packaging: Powder in PE bottle			

Titanium(IV)carbide, 99%			
NC-0004-HP	[12070-08-5]	TiC	MW 59.88
APS: 50 nm		10 g	29.00 €
SSA: ~23 m²/g		25 g	59.00 €
PM: spherical		50 g	79.00 €
Appearance: black powder		100 g	139.00 €
		500 g	519.00 €
	Danger, UN3178; 4.1; PG III		
Packaging: Powder in PE bottle			


Titanium(III)nitride, 97+%			
NC-0019-SG	[25583-20-4]	TiN	MW 61.87
APS: 100 nm		10 g	29.00 €
SSA: >70 m²/g		25 g	55.00 €
PM: spherical		50 g	89.00 €
Appearance: black powder		100 g	159.00 €
		500 g	499.00 €
	Danger, UN3178; 4.1; PG III		
Packaging: Powder in PE bottle			



Titanium(IV)carbide, 99%			
NC-0011-HP	[12070-08-5]	TiC	MW 59.88
APS: 40 nm		10 g	39.00 €
SSA: > 50 m²/g		25 g	79.00 €
PM: spherical		50 g	129.00 €
Appearance: black powder		100 g	219.00 €
		500 g	779.00 €
	Danger, UN3178; 4.1; PG III		
Packaging: Powder in PE bottle			



Tungsten (IV)carbide, 99.95%			
NC-0014-UP	[12070-12-1]	WC	MW 195.85
APS: 150-200 nm		10 g	25.00 €
SSA: -		25 g	35.00 €
PM: -		50 g	45.00 €
Appearance: black powder		100 g	65.00 €
		500 g	249.00 €
	Danger, UN3178; 4.1; PG III		
Packaging: Powder in PE bottle			

Products and prices 2017

METAL NITRIDES AND CARBIDES

Tungsten(IV)disulfide, 99%			
NC-0016-HP	[12138-09-9]	WS ₂	MW 247.97
APS: 90 nm	10 g	109.00 €	
SSA: 30 m ² /g	25 g	229.00 €	
PM: Hexagonal Lamellar	50 g	379.00 €	
Appearance: grey powder	100 g	659.00 €	
 Warning			
Packaging: Powder in PE bottle			

Zirconium(IV)carbide, 97%; Hf-content ~3%			
NC-0006-SG	[12070-14-3]	ZrC	MW 103.24
APS: 40 nm	10 g	39.00 €	
SSA: 70 m ² /g	25 g	79.00 €	
PM: spherical	50 g	129.00 €	
Appearance: black powder	100 g	199.00 €	
	500 g	789.00 €	
  Warning, UN3178; 4.1; PG II			
Packaging: Powder in PE bottle			


Zirconium(IV)carbide, 97%; Hf-content ~3%			
NC-0013-SG	[12070-14-3]	ZrC	MW 103.24
APS: < 60 nm	10 g	39.00 €	
SSA: > 70 m ² /g	25 g	75.00 €	
PM: spherical	50 g	119.00 €	
Appearance: black powder	100 g	189.00 €	
	500 g	659.00 €	
  Warning, UN3178; 4.1; PG II			
Packaging: Powder in PE bottle			

Aluminium powder, 99.9%

NM-0015-UP	[7429-90-5]	Al	MW 26.98
------------	-------------	----	----------

APS: 18 nm
SSA: 40-60 m²/g
PM: spherical
Appearance: black powder

Product is discontinued
Delivery while stock last

 Danger, **UN1396; 4.3; PG II**



Packaging: Partially passivated powder in PE bottle under Argon

Copper powder, 99.5%

NM-0016-HP	[7440-50-8]	Cu	MW 63.55
------------	-------------	----	----------

APS: 25 nm
SSA: 30-50 m²/g
PM: spherical
Appearance: black powder

Product is discontinued
Delivery while stock last

  Danger, **UN3089; 4.1; PG II**


Packaging: Partially passivated powder in PE bottle under Argon

Aluminium powder, 99.9%

NM-0039-UP	[7429-90-5]	Al	MW 26.98
------------	-------------	----	----------

APS: 40-60 nm
SSA: 20-48 m²/g
PM: spherical
Appearance: black powder

Product is discontinued
Delivery while stock last

 Danger, **UN1396; 4.3; PG II**



Packaging: Partially passivated powder in PE bottle under Argon

Copper powder, 99.9%

NM-0044-UP	[7440-50-8]	Cu	MW 63.55
------------	-------------	----	----------

APS: 60-80 nm
SSA: 6-8 m²/g
PM: spherical
Appearance: black powder

5 g	29.00 €
10 g	45.00 €
25 g	89.00 €
50 g	135.00 €
100 g	219.00 €

  Danger, **UN3089; 4.1; PG II**



Packaging: Powder in PE bottle under Argon

Chromium powder, coated with oleic acid, 99.5%

NM-0006-HP	[7440-47-3]	Cr	MW 52.00
------------	-------------	----	----------

APS: 50 nm
SSA: -
PM: ~ spherical
Appearance: grey and black powder

5 g	95.00 €
10 g	159.00 €
25 g	319.00 €
50 g	589.00 €

  Danger, **UN3089; 4.1; PG II**

Packaging: Powder coated with oleic acid in glass bottle

Gold powder, 99.99%

NM-0002-UP	[7440-57-5]	Au	MW 196.97
------------	-------------	----	-----------

APS: 50-100 nm
SSA: 3.3 m²/g
PM: spherical
Appearance: dark brown powder

Price available on request



Packaging: Powder in PE bottle

Cobalt powder, 99.8%

NM-0007-HP	[7440-48-4]	Co	MW 58.93
------------	-------------	----	----------

APS: 28 nm
SSA: 40-60 m²/g
PM: spherical
Appearance: grey and black powder

5 g	45.00 €
10 g	65.00 €
25 g	129.00 €
50 g	209.00 €
100 g	339.00 €

  Danger, **UN3089; 4.1; PG II**

Packaging: Partially passivated powder in PE bottle under Argon


Gold powder, 99.9%


NM-0032-UP	[7440-57-5]	Au	MW 196.97
------------	-------------	----	-----------


APS: <100 nm
SSA: 1.3-2.2 m²/g
PM: ~ spherical
Appearance: black powder


Price available on request
Product is discontinued
Delivery while stock last


Packaging: Powder in PE bottle


Iron powder, 99.9%			
NM-0029-UP	[7439-89-6]	Fe	MW 55.85
APS: 60 - 80 nm	5 g	25.00 €	
SSA: 7 m ² /g	10 g	39.00 €	
PM: spherical	25 g	75.00 €	
Appearance: black powder	50 g	125.00 €	
	100 g	199.00 €	
 Danger, UN3089; 4.1; PG III			
Packaging: Powder in PE bottle under Argon			


Nickel powder, 99.8%			
NM-0028-HP	[7440-02-0]	Ni	MW 58.69
APS: 20 nm			
SSA: 40-60 m ² /g			Product is discontinued
PM: spherical			
Appearance: blue and black powder			Delivery while stock last
 Danger, UN3089; 4.1; PG II			
Packaging: Powder in PE bottle under Argon			


Iron powder, 99.9%			
NM-0019-UP	[7439-89-6]	Fe	MW 55.85
APS: 25 nm	5 g	39.00 €	
SSA: 40-60 m ² /g	10 g	55.00 €	
PM: spherical	25 g	139.00 €	
Appearance: black powder	50 g	229.00 €	
	100 g	349.00 €	
 Danger, UN3089; 4.1; PG III			
Packaging: Partially passivated powder in PE bottle under Argon			


Palladium powder, 99.9%			
NM-0041-UP	[7440-05-3]	Pd	MW 106.42
APS: 80 nm			
SSA: 40 m ² /g			Price available on request
PM:			
Appearance: black powder			
 Danger, UN3089; 4.1; PG III			
Packaging: Powder in PE bottle under Argon			


Molybdenum powder, 99+%			
NM-0010-HP	[7439-98-7]	Mo	MW 95.94
APS: 80 nm	5 g	45.00 €	
SSA: 4-10 m ² /g	10 g	65.00 €	
PM: ~ spherical	25 g	149.00 €	
Appearance: black powder	50 g	259.00 €	
	100 g	399.00 €	
 Danger, UN3089; 4.1; PG II			
Packaging: Powder in PE bottle under Argon			


Platinum powder, 99.9%			
NM-0042-UP	[7440-06-4]	Pt	MW 195.08
APS: 100 nm			
SSA: 20 m ² /g			Price available on request
PM:			
Appearance: black powder			
 Danger, UN3089; 4.1; PG III			
Packaging: Powder in PE bottle under Argon			


Nickel powder, 99.8%			
NM-0030-HP	[7440-02-0]	Ni	MW 58.69
APS: 60 - 80 nm			
SSA: 8-10 m ² /g			Product is discontinued
PM: spherical			
Appearance: black powder			Delivery while stock last
 Danger, UN3089; 4.1; PG II			
Packaging: Powder in PE bottle under Argon			


Silicon powder, 99+%			
NM-0020-HP	[7440-21-3]	Si	MW 28.09
APS: <100 nm	5 g	39.00 €	
SSA: 80 m ² /g	10 g	65.00 €	
PM: spherical	25 g	129.00 €	
Appearance: yellow or brown powder	50 g	229.00 €	
	100 g	349.00 €	
 Danger, UN1346; 4.1; PG III			
Packaging: Partially passivated powder in PE bottle under Argon			


Stainless steel powder 316L, 99.9%			
NM-0035-UP	[65997-19-5]	Fe	MW 55.85
APS: 60-80 nm	5 g	65.00 €	
SSA: -	10 g	115.00 €	
PM: spherical	25 g	229.00 €	
Appearance: black powder	50 g	345.00 €	
	100 g	559.00 €	
 Danger, UN3089; 4.1; PG II			
Packaging: Powder in PE bottle under Argon			


Silver powder, coated with fatty acids, 99+%			
NM-0037-HP	[7440-22-4]	Ag	MW 107.87
APS: 20 nm	5 g	59.00 €	
SSA: 15-20 m ² /g	10 g	99.00 €	
PM: spherical	25 g	209.00 €	
Appearance: greenish	50 g	339.00 €	
	100 g	609.00 €	
 Warning			
Packaging: Powder in PE bottle			


Silver powder, 99.95%			
NM-0001-UP	[7440-22-4]	Ag	MW 107.87
APS: ~150 nm	5 g	55.00 €	
SSA: -	10 g	85.00 €	
PM: nearly spherical	25 g	169.00 €	
Appearance: grey powder	50 g	279.00 €	
	100 g	449.00 €	
 Warning			
Packaging: Powder in PE bottle			



Tin powder, 99.7%			
NM-0040-UP	[7440-31-5]	Sn	MW 118.71
APS: <100 nm	5 g	25.00 €	
SSA: ~7 m ² /g	10 g	39.00 €	
PM: spherical	25 g	79.00 €	
Appearance: black powder	50 g	125.00 €	
	100 g	199.00 €	
 Danger, UN3089; 4.1; PG II			
Packaging: Powder in PE bottle under Argon			



Silver powder, 99.5%			
NM-0023-HP	[7440-22-4]	Ag	MW 107.87
APS: 35 nm	5 g	59.00 €	
SSA: 20-30 m ² /g	10 g	99.00 €	
PM: spherical	25 g	199.00 €	
Appearance: grey powder	50 g	299.00 €	
	100 g	499.00 €	
 Warning			
Packaging: Powder in PE bottle			



Tantalum powder, 99+%			
NM-0036-HP	[7440-25-7]	Ta	MW 180.95
APS: 50-80 nm	5 g	45.00 €	
SSA: -	10 g	79.00 €	
PM: -	25 g	169.00 €	
Appearance: light grey	50 g	239.00 €	
 Danger, UN3089; 4.1; PG II			
Packaging: Powder in PE bottle under Argon			



Silver powder, 99.9%			
NM-0038-UP	[7440-22-4]	Ag	MW 107.87
APS: 50-60 nm	5 g	39.00 €	
SSA: ~12 m ² /g	10 g	59.00 €	
PM: spherical	25 g	129.00 €	
Appearance: black powder	50 g	199.00 €	
	100 g	339.00 €	
 Warning			
Packaging: Powder in PE bottle			



Titanium powder, 99.9%			
NM-0031-UP	[7440-32-6]	Ti	MW 47.87
APS: 60 - 80 nm	5 g	39.00 €	
SSA: 13.8 m ² /g	10 g	69.00 €	
PM: spherical	25 g	145.00 €	
Appearance: black powder	50 g	225.00 €	
	100 g	375.00 €	
 Danger, UN2545; 4.2; PG II			
Packaging: Partially passivated powder in PE bottle under Argon			

Tungsten powder, 99.9%			
NM-0033-UP	[7440-33-7]	W	MW 183.84
APS: 50 nm	5 g	49.00 €	
SSA: ~8 m ² /g	10 g	79.00 €	
PM: spherical	25 g	175.00 €	
Appearance: black powder	50 g	299.00 €	
  Danger, UN3089; 4.1; PG II			
Packaging: Powder in PE bottle under Argon			

Tungsten powder, 99%			
NM-0034-HP	[7440-33-7]	W	MW 183.84
APS: 80-120 nm	5 g	29.00 €	
SSA: 4-8 m ² /g	10 g	49.00 €	
PM: nearly spherical	25 g	99.00 €	
Appearance: black powder	50 g	199.00 €	
	100 g	249.00 €	
  Danger, UN3089; 4.1; PG II			
Packaging: Powder coated with oleic acid in glass bottle			

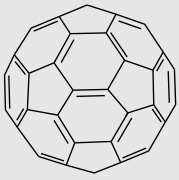
Zinc powder, 99.5%			
NM-0004-HP	[7440-66-6]	Zn	MW 65.39
APS: 130 nm	5 g	19.00 €	
SSA: 6-8 m ² /g	10 g	29.00 €	
PM: spherical	25 g	59.00 €	
Appearance: grey powder	50 g	99.00 €	
	100 g	149.00 €	
  Danger, UN 1436, 4.3, PG II			
Packaging: Powder in PE bottle under Argon			

Zinc powder, 99.9%			
NM-0045-UP	[7440-66-6]	Zn	MW 65.39
APS: 40-60 nm	5 g	45.00 €	
SSA: ~12 m ² /g	10 g	69.00 €	
PM: spherical	25 g	139.00 €	
Appearance: grey powder	50 g	225.00 €	
	100 g	349.00 €	
  Danger, UN 1436, 4.3, PG II			
Packaging: Partially passivated powder in PE bottle under Argon			


Zinc powder, 99.9%			
NM-0025-UP	[7440-66-6]	Zn	MW 65.39
APS: 35 nm			
SSA: ~12 m ² /g			
PM: spherical			
Appearance: grey powder			
		Product discontinued	
		Delivery while stock last	
  Danger, UN 1436, 4.3, PG II			
Packaging: Partially passivated powder in PE bottle under Argon			

Fullerene C₆₀, 99.5+%

CP-0001-HP	[99685-96-8]	C ₆₀	MW 720.64
------------	--------------	-----------------	-----------



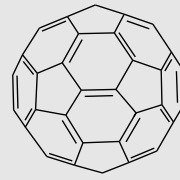
0.5 g	45.00 €
1 g	69.00 €
2 g	109.00 €
5 g	215.00 €
10 g	359.00 €


 Warning


Packaging: Powder in glass bottle

Fullerenes C₆₀, 99.0%

CP-0001-SG	[99685-96-8]	C ₆₀	MW 720.64
------------	--------------	-----------------	-----------



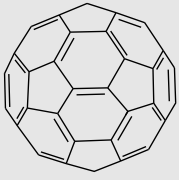
0.5 g	35.00 €
1 g	59.00 €
2 g	99.00 €
5 g	215.00 €
10 g	349.00 €


 Warning


Packaging: Powder in glass bottle

Fullerene C₆₀, 99.95%

CP-0001-UP	[99685-96-8]	C ₆₀	MW 720.64
------------	--------------	-----------------	-----------



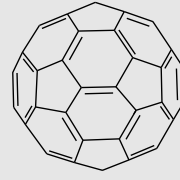
0.5 g	89.00 €
1 g	149.00 €
2 g	239.00 €
5 g	475.00 €


 Warning


Packaging: Powder in glass bottle

Fullerenes C₆₀, 99.99%

CP-0001-UP+	[99685-96-8]	C ₆₀	MW 720.64
-------------	--------------	-----------------	-----------



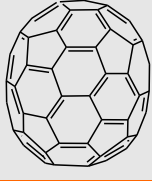
0.1 g	29.00 €
0.25 g	59.00 €
0.5 g	109.00 €
1 g	199.00 €
2 g	375.00 €


 Warning


Packaging: Powder in glass bottle

Fullerene C₇₀, 98%

CP-0002-SG	[115383-22-7]	C ₇₀	MW 840.75
------------	---------------	-----------------	-----------



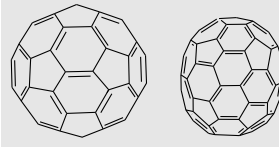
0.1 g	€
0.25 g	
0.5 g	€
1 g	
5 g	


 Warning


Packaging: Powder in glass bottle

Fullerenes C₆₀/C₇₀ (~70:25:5 [higher fullerenes])

CP-0003-TG	[131159-39-2]	C ₆₀ /C ₇₀	
------------	---------------	----------------------------------	--



1 g	35.00 €
2 g	59.00 €
5 g	129.00 €
10 g	215.00 €


 Warning

Packaging: Powder in glass bottle

Fullerene C₇₀, 99.5%

CP-0002-HP	[115383-22-7]	C ₇₀	MW 840.75
------------	---------------	-----------------	-----------



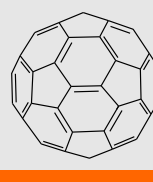
Price available on request


 Warning

Packaging: Powder in glass bottle

Fullerene C₆₀, C13 enriched


CP-0027-HP	[99685-96-8]	C ₆₀	MW ~735
------------	--------------	-----------------	---------



20-30 % C13 enriched

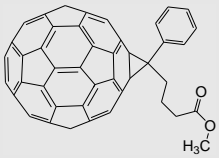
Product is discontinued

Delivery while stock last



 Warning

Packaging: Powder in glass bottle

C₆₀ PCBM 99.5+%
 CP-0028-HP [160848-21-5] C₆₀C₁₂H₁₄O₂ MW 910.88



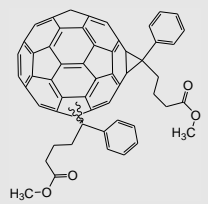
10 mg 25.00 €
 50 mg 65.00 €
 100 mg 99.00 €
 500 mg 389.00 €
 1 g 699.00 €




Warning

Packaging: Powder in glass bottle

C₆₀ PCBM-BIS 99.5+%
 CP-0029-HP [none] C₆₀(C₁₂H₁₄O₂)₂ MW 1101.1



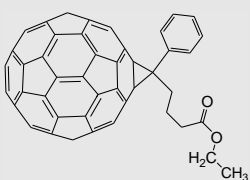
Price available on request




Warning

Packaging: Powder in glass bottle

C₆₀ PCBE 99+%
 CP-0030-HP [none] C₆₀C₁₃H₁₆O₂ MW 924.91



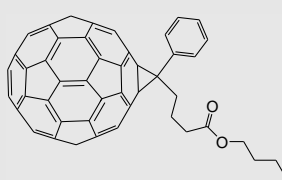
Price available on request




Warning

Packaging: Powder in glass bottle

C₆₀ PCBB 99+%
 CP-0031-HP [571177-66-7] C₆₀C₁₅H₂₀O₂ MW 952.79



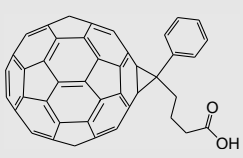
Price available on request




Warning

Packaging: Powder in glass bottle

C₆₀ PCBA 99%
 CP-0032-HP [161196-25-4] C₆₀C₁₁H₁₂O₂ MW 896.85



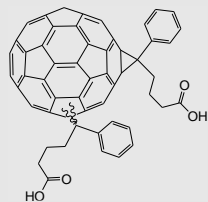
10 mg 39.00 €
 50 mg 139.00 €
 100 mg 225.00 €
 500 mg 945.00 €




Warning

Packaging: Powder in glass bottle

C₆₀ PCBA-BIS 99%
 CP-0033-HP [none] C₆₀(C₁₁H₁₂O₂)₂ MW 1073.1



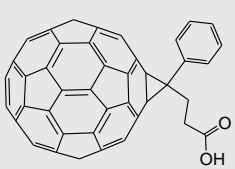
Price available on request




Warning

Packaging: Powder in glass bottle

C₆₀ PCPA 99%
 CP-0034-HP [none] C₆₀C₁₀H₁₀O₂ MW 882.83



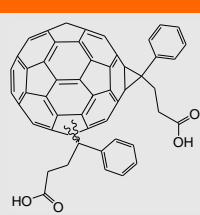
Price available on request




Warning

Packaging: Powder in glass bottle

C₆₀ PCPA-BIS 99%
 CP-0035-HP [none] C₆₀(C₁₀H₁₀O₂)₂ MW 1045.0



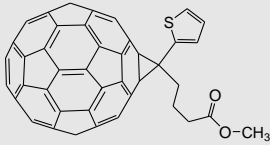
Price available on request




Warning

Packaging: Powder in glass bottle

C₆₀ ThCBM 99.5+%
 CP-0040-HP [925673-03-6] C₆₀C₁₀H₁₂O₂S MW 916.91



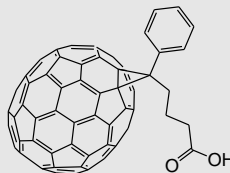
10 mg 39.00 €
 50 mg 149.00 €
 100 mg 245.00 €
 500 mg 999.00 €




Warning

Packaging: Powder in glass bottle

C₇₀ PCBA 99+%
 CP-0049-HP [1119193-90-6] C₇₀C₁₁H₁₂O₂ MW 1017.0



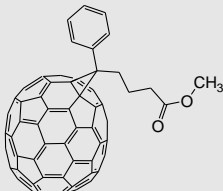
10 mg 59.00 €
 50 mg 199.00 €
 100 mg 329.00 €
 250 mg €




Warning

Packaging: Powder in glass bottle

C₇₀ PCBM 99+%
 CP-0045-HP [609771-63-3] C₇₀C₁₂H₁₄O₂ MW 1030.9



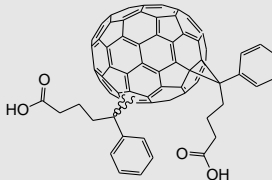
Price available on request




Warning

Packaging: Powder in glass bottle

C₇₀ PCBA-BIS 99+%
 CP-0050-HP [none] C₇₀(C₁₁H₁₂O₂)₂ MW 1193.2



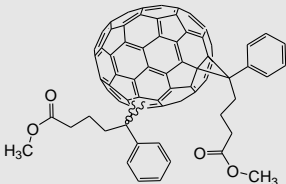
Price available on request




Warning

Packaging: Powder in glass bottle

C₇₀ PCBM-BIS 99+%
 CP-0046-HP [none] C₇₀(C₁₂H₁₄O₂)₂ MW 1221.2



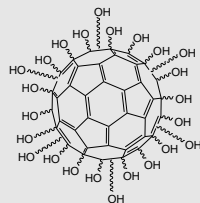
Warning




Warning

Packaging: Powder in glass bottle

C₆₀(OH)₂₂₋₂₆ 99+%
 CP-0057-HP [none] C₆₀(OH)₂₂₋₂₆



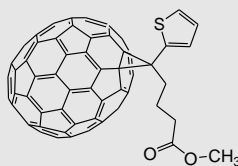
Price available on request




Warning

Packaging: Powder in glass bottle

C₇₀ ThCBM 99+%
 CP-0047-HP [1000980-79-9] C₇₀C₁₀H₁₂O₂S MW 1037.0



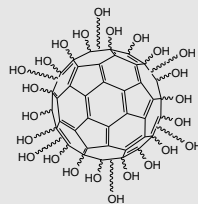
Warning




Warning

Packaging: Powder in glass bottle

C₆₀(OH)₂₄ 99+%
 CP-0058-HP [none] C₆₀(OH)₂₄ MW 1128.8



Price available on request



Warning

Packaging: Powder in glass bottle

Products and prices 2017

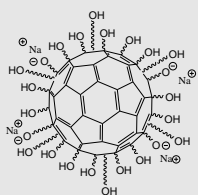
CARBON-BASED NANOPARTICLES

C₆₀(OH)₁₈₋₂₄(ONa)₂₋₄ 99+%

CP-0060-HP

[none]

C₆₀(OH)₁₈₋₂₄(ONa)₂₋₄



10 mg	49.00 €
50 mg	199.00 €
100 mg	339.00 €
250 mg	695.00 €



Warning

Packaging: Powder in glass bottle

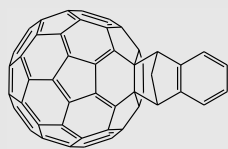
C₆₀ ICMA, 99.5%

CP-0065-HP

[186682-36-0]

C₆₀(C₉H₈)

MW 836.0



Warning

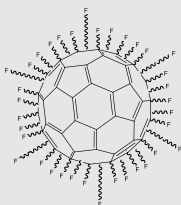
Packaging: Powder in glass bottle

C₆₀F₃₆ 99.5%

CP-0074-HP

[none]

C₆₀F₃₆




Product is discontinued


Delivery while stock last





Warning


Packaging: Powder in glass bottle


Single-Walled Carbon Nanotubes, 90%			
CP-0011-SG	[308068-56-6]	C	MW 12.01
OD: 1-2 nm	0.5 g	89.00 €	
L: 5-30 µm	1 g	159.00 €	
SSA: > 380 m ² /g	2 g	259.00 €	
	5 g	479.00 €	
 Warning			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 97+%			
CP-0017-SG	[308068-56-6]	C	MW 12.01
OD: 10-20 nm	5 g	39.00 €	
L: >5 µm	10 g	49.00 €	
SSA: 160-200 m ² /g	25 g	109.00 €	
	50 g	189.00 €	
	100 g	309.00 €	
 Warning			
Packaging: Powder in PE bottle			


Double-Walled Carbon Nanotubes, 60%			
CP-0013-SG	[308068-56-6]	C	MW 12.01
OD: 2-4 nm	0.5 g	69.00 €	
L: ~50 µm	1 g	115.00 €	
SSA: > 350 m ² /g	2 g	189.00 €	
	5 g	399.00 €	
 Warning			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 97+%			
CP-0004-SG	[308068-56-6]	C	MW 12.01
OD: 10-20 nm	5 g	45.00 €	
L: >2 µm	10 g	69.00 €	
SSA: 100-160 m ² /g	25 g	119.00 €	
	50 g	219.00 €	
	100 g	369.00 €	
 Warning			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 95+%			
CP-0005-SG	[308068-56-6]	C	MW 12.01
OD: < 8 nm	5 g	59.00 €	
L: 10-30 µm	10 g	99.00 €	
SSA: >350 m ² /g	25 g	199.00 €	
	50 g	299.00 €	
	100 g	499.00 €	
 Warning			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 95+%			
CP-0006-SG	[308068-56-6]	C	MW 12.01
OD: 10-30 nm	5 g	49.00 €	
L: 5-15 µm	10 g	69.00 €	
SSA: 40-300 m ² /g	25 g	119.00 €	
	50 g	199.00 €	
	100 g	329.00 €	
 Warning; Discontinued Delivery while stock last			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 95+%			
CP-0014-SG	[308068-56-6]	C	MW 12.01
OD: > 50 nm	5 g	55.00 €	
L: 0.5-2 µm	10 g	79.00 €	
SSA: 40-300 m ² /g	25 g	129.00 €	
	50 g	229.00 €	
	100 g	389.00 €	
 Warning; Discontinued Delivery while stock last			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 95+%			
CP-0008-SG	[308068-56-6]	C	MW 12.01
OD: 10-30 nm	5 g	39.00 €	
L: 1-2 µm	10 g	59.00 €	
SSA: 40-300 m ² /g	25 g	99.00 €	
	50 g	189.00 €	
	100 g	309.00 €	
 Warning; Discontinued Delivery while stock last			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 97+%			
CP-0009-SG	[308068-56-6]	C	MW 12.01
OD: 20-40 nm	5 g	39.00 €	
L: >5 µm	10 g	59.00 €	
SSA: 80-140 m ² /g	25 g	99.00 €	
	50 g	189.00 €	
	100 g	309.00 €	
 Warning			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 97+%			
CP-0010-SG	[308068-56-6]	C	MW 12.01
OD: 60-100 nm	5 g	39.00 €	
L: > 5 µm	10 g	59.00 €	
SSA: 40-70 m ² /g	25 g	99.00 €	
	50 g	189.00 €	
	100 g	309.00 €	
 Warning			
Packaging: Powder in PE bottle			

Multi-Walled Carbon Nanotubes, 97+%			
CP-0012-SG	[308068-56-6]	C	MW 12.01
OD: 20-40 nm	5 g	45.00 €	
L: <2 µm	10 g	69.00 €	
SSA: 70-150 m ² /g	25 g	119.00 €	
	50 g	219.00 €	
	100 g	369.00 €	
 Warning			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 95+%			
CP-0084-SG	[308068-56-6]	C	MW 12.01
OD: 8-15 nm			
L: ~50 µm			Price available on request
 Warning			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 95+%			
CP-0015-SG	[308068-56-6]	C	MW 12.01
OD: 40-60 nm	5 g	39.00 €	
L: >5 µm	10 g	59.00 €	
SSA: 40-70 m ² /g	25 g	99.00 €	
	50 g	189.00 €	
	100 g	309.00 €	
 Warning			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 90%			
CP-0086-SG	[308068-56-6]	C	MW 12.01
OD: 10 nm	100 g	49.00 €	
L: ~1.5 µm	200 g	79.00 €	
SSA: 250-300 m ² /g	500 g	169.00 €	
	1 kg	269.00 €	
 Warning			
Packaging: Powder in PE bottle			


Multi-Walled Carbon Nanotubes, 95+%			
CP-0016-SG	[308068-56-6]	C	MW 12.01
OD: 40-60 nm	5 g	45.00 €	
L: <2 µm	10 g	59.00 €	
SSA: 60-160 m ² /g	25 g	119.00 €	
	50 g	219.00 €	
	100 g	369.00 €	
 Warning			
Packaging: Powder in PE bottle			


Now available			
<p>Dispersions of Carbon Nanotubes on page 27</p>			


Graphene, 0.55 -3.74 nm, >98wt%			
CP-0080-HP	[1034343-98-0]	C	MW 12.01
Thickness: 0.55 - 3.74 nm	250 mg	149.00 €	
SSA: 500 - 1000 m ² /g	500 mg	249.00 €	
Size: 0.5 – 3 µm	1 g	399.00 €	
Layer: 1-10	2 g	699.00 €	
Appearance: black powder			
 Warning			
Packaging: Powder in PE bottle			


Graphene platelets, ~2 nm, 99.5%			
CP-0081-HP	[1034343-98-0]	C	MW 12.01
Thickness: ~2 nm	25 g	29.00 €	
SSA: 750 m ² /g	50 g	49.00 €	
PM: -	100 g	79.00 €	
Appearance: black powder	500 g	259.00 €	
	1 kg	459.00 €	
 Warning			
Packaging: Powder in PE bottle			


Graphene platelets, <10 µm, >93% (SE1132)			
CP-00XX-HP	[1034343-98-0]	C	MW 12.01
Layers: ~10-15	25 g		
SSA: 180 m ² /g	50 g		
Oxygen: < 3 %	100 g		
Appearance: black powder	500 g		
	1 kg		
 Warning			
Packaging: Powder in PE bottle			


Graphene platelets, 6-8 nm, 99.5%			
CP-0067-HP	[1034343-98-0]	C	MW 12.01
Thickness: 6-8 nm	25 g	39.00 €	
SSA: 120-150 m ² /g	50 g	65.00 €	
PM: -	100 g	109.00 €	
Appearance: black powder	500 g	355.00 €	
	1 kg	639.00 €	
 Warning			
Packaging: Powder in PE bottle			


Graphene platelets, <10 µm, >98% (SE1233)			
CP-00XX-HP	[1034343-98-0]	C	MW 12.01
Layers: 4-7	25 g		
SSA: 450~550 m ² /g	50 g		
Oxygen: ~18 %	100 g		
Appearance: black powder	500 g		
	1 kg		
 Warning			
Packaging: Powder in PE bottle			


Graphene platelets, 11-15 nm, 99.5%			
CP-0068-HP	[1034343-98-0]	C	MW 12.01
Thickness: 11-15 nm	25 g	29.00 €	
SSA: 50-80 m ² /g	50 g	49.00 €	
PM: -	100 g	79.00 €	
Appearance: black powder	500 g	259.00 €	
	1 kg	479.00 €	
 Warning			
Packaging: Powder in PE bottle			


Graphene platelets, <10 µm, >70% (SE1430)			
CP-00XX-HP	[1034343-98-0]	C	MW 12.01
Layers: 9-14	25 g		
SSA: 180 m ² /g	50 g		
Oxygen: ~ 18 %	100 g		
Appearance: black powder	500 g		
	1 kg		
 Warning			
Packaging: Powder in PE bottle			


Graphite powder, 93%			
CP-0018-SG	[7782-42-5]	C	MW 12.01
APS: 3-4 nm	5 g	45.00 €	
SSA: 540-650 m ² /g	10 g	69.00 €	
PM: spherical	25 g	149.00 €	
Appearance: black powder	50 g	249.00 €	
	100 g	449.00 €	
 Warning			
Packaging: Powder in PE bottle			


Graphite powder, 99.9%			
CP-0019-UP	[7782-42-5]	C	MW 12.01
APS: 400 nm		10 g	49.00 €
SSA: -		25 g	89.00 €
PM: flaky		50 g	129.00 €
Appearance: black powder		100 g	195.00 €
		500 g	599.00 €
	Warning		
Packaging: Powder in PE bottle			


Single-Walled Carbon Nanotubes, -OH functionalized (~4%, 60% SWCNT, 90% CNT)			
CP-0023-SG [308068-56-6]			
OD: 1-2nm	0.25 g	95.00 €	
L: 5-20 µm	0.5 g	149.00 €	
SSA: >400 m²/g	1 g	229.00 €	
	2 g	339.00 €	
	5 g	559.00 €	
	Warning		
Packaging: Powder in glass bottle			


Multi-Walled Carbon Nanotubes, -COOH functionalized, 95+%, (-COOH > 1%)			
CP-0020-SG [308068-56-6]			
OD: 20-30 nm	1 g	45.00 €	
L: 10-30 µm	2 g	69.00 €	
SSA: 110 m²/g	5 g	135.00 €	
	10 g	229.00 €	
	25 g	429.00 €	
	Warning		
Packaging: Powder in glass bottle			

Multi-Walled Carbon Nanotubes, -COOH functionalised, 95+%, (-COOH ~ 2.5%)			
CP-0024-SG [308068-56-6]			
OD: 8-15 nm	1 g	59.00 €	
L: ~50 µm	2 g	79.00 €	
SSA: ~230 m²/g	5 g	165.00 €	
	10 g	219.00 €	
	25 g	429.00 €	
	Warning		
Packaging: Powder in glass bottle			

Multi-Walled Carbon Nanotubes, -OH functionalized, 95+%, (-OH > 1.5%)			
CP-0021-SG [308068-56-6]			
OD: 20-30 nm	1 g	45.00 €	
L: 10-30 µm	2 g	69.00 €	
SSA: 110 m²/g	5 g	139.00 €	
	10 g	219.00 €	
	25 g	429.00 €	
	Warning		
Packaging: Powder in glass bottle			

Multi-Walled Carbon Nanotubes, -OH functionalized, 95+%			
CP-0069-SG [308068-56-6]			
OD: 8-15 nm	1 g	49.00 €	
L: 10-50 µm	2 g	69.00 €	
SSA: > 225 m²/g	5 g	139.00 €	
	10 g	219.00 €	
	25 g	419.00 €	
	Warning		
Packaging: Powder in glass bottle			

Single-Walled Carbon Nanotubes, -COOH functionalised (~5%, 60% SWCNT, 90% CNT)			
CP-0022-SG [308068-56-6]			
OD: 1-2 nm	0.25 g	99.00 €	
L: 5-20 µm	0.5 g	155.00 €	
SSA: >400 m²/g	1 g	239.00 €	
	2 g	349.00 €	
	5 g	659.00 €	
	Warning		
Packaging: Powder in glass bottle			

Multi-Walled Carbon Nanotubes, -NH₂ functionalized, 95+%, (-NH₂ ~ 0.45%)	
CP-0075-SG	[308068-56-6]
OD: 8-15 nm	
L: 50 µm	
SSA: >233 m ² /g	
	Product discontinued Delivery while stock last
	Warning
Packaging: Powder in glass bottle	

**Multi-Walled Carbon Nanotubes,
 -OH functionalized, 95+%, (short)**

CP-0085-SG [308068-56-6]

OD: 10-20 nm	1 g	59.00 €
L: 0.5-2 µm	2 g	99.00 €
SSA: > 200m ² /g	5 g	189.00 €
	10 g	269.00 €



Warning

Packaging: Powder in glass bottle

**Multi-Walled Carbon Nanotubes,
 -OH functionalized, 95+%, (-OH ~ 3%)**

CP-0077-SG [308068-56-6]

OD: 30-50 nm	1 g	39.00 €
L: 10-20 µm	2 g	59.00 €
SSA: > 100 m ² /g	5 g	79.00 €
	10 g	119.00 €
	25 g	219.00 €



Warning

Packaging: Powder in glass bottle

**Multi-Walled Carbon Nanotubes,
 -COOH functionalized, 95+%, (-COOH ~ 2%)**


CP-0078-SG [308068-56-6]


OD: 10-20 nm	1 g	39.00 €
L: 10-30 µm	2 g	59.00 €
SSA: > 200 m ² /g	5 g	79.00 €
	10 g	109.00 €
	25 g	209.00 €






Warning


Packaging: Powder in glass bottle



Titanium Oxide (rutile, 40 wt%, 30-50 nm) in water			
DP-0001-HP	[1317-80-2] [7732-18-5]	TiO ₂ /H ₂ O	
APS: 30-50 nm	25 g	29.00 €	
SSA: -	100 g	69.00 €	
pH: 6-8	500 g	259.00 €	
Appearance: milky liquid	1 kg	419.00 €	
 Warning			
Packaging in glass bottle			


Titanium Oxide (anatase, 15 wt%, 5-30 nm) in water			
DP-0006-HP	[1317-70-0] [7732-18-5]	TiO ₂ /H ₂ O	
APS: 5-30 nm	25 g	19.00 €	
SSA: -	100 g	49.00 €	
pH: 6-8	500 g	179.00 €	
Appearance: milky liquid	1 kg	299.00 €	
 Warning			
Packaging in glass bottle			



Titanium Oxide (anatase, 20 wt%, 15 nm) in 2-propanol			
DP-0002-HP	[1317-70-0] [67-63-0]	TiO ₂ /C ₃ H ₈ O	
APS: 15 nm	25 g	29.00 €	
SSA: -	50 g	45.00 €	
pH: -	100 g	69.00 €	
Appearance: milky liquid	500 g	239.00 €	
  Danger, UN1219; 3; PG II			
Packaging in glass bottle			

Zinc Oxide (20 wt%, 40 nm) in water			
DP-0007-HP	[1314-13-2] [7732-18-5]	ZnO/H ₂ O	
APS: 40 nm	25 g	25.00 €	
SSA: 50~70 m ² /g	100 g	75.00 €	
pH: -	500 g	235.00 €	
Appearance: pale yellow			
 Warning			
Packaging in glass bottle			

1wt% MWCNT in water			
DP-0003-HP	[308068-56-6] [7732-18-5]		
Available with all our Mult-Walled Carbon Nanotubes.	20 g	35.00 €	
	50 g	49.00 €	
	100 g	69.00 €	
Do not store longer than two month	500 g	179.00 €	
 Warning			
Packaging in glass bottle			

Zinc Oxide (40 wt%, 20 nm) in 1-Methoxy-2-propyl acetate			
DP-0008-HP	[1314-13-2] [108-65-6]	ZnO/C ₆ H ₁₂ O ₃	
APS: 20 nm	25 g	85.00 €	
SSA: -	50 g	129.00 €	
pH: -	100 g	219.00 €	
Appearance: milky liquid	500 g	799.00 €	
  Danger, UN1993; 3; PG II			
Packaging in glass bottle			

0.5wt% SWCNT in water			
DP-0004-HP	[308068-56-6] [7732-18-5]		
Dispersion of CP-0011 in water	20 g	39.00 €	
	50 g	69.00 €	
Do not store longer than two month	100 g	99.00 €	
	500 g	349.00 €	
 Warning			
Packaging in glass bottle			

γ-Aluminium Oxide (10 wt%, 15 nm) in 2-propanol			
DP-0009-HP	[1344-28-1] [67-63-0]	Al ₂ O ₃ /C ₃ H ₈ O	
APS: 15 nm	25 g	59.00 €	
SSA: -	50 g	99.00 €	
pH: 6-8	100 g	179.00 €	
Appearance: milky liquid	500 g	715.00 €	
  Danger, UN1219; 3; PG II			
Packaging in glass bottle			

Copper (14 wt%, 5-7 nm) in organic media

DP-0011-HP	[7440-50-8]	Cu		
APS: 5-7 nm		25 g	39.00 €	
SSA: -		50 g	69.00 €	
Viscosity: 1.15-1.18 Pa·s		100 g	119.00 €	
Appearance: brown to black		500 g	449.00 €	
		1 kg	749.00 €	



Danger

Packaging in glass bottle

Magnetit, highly uniform Nanospheres (1mg/mL in Chloroform)

DP-1111-HP	[1309-38-2]	Fe ₃ O ₄ /CHCl ₃		
APS: 12 nm		1 mL	49.00 €	
PM: nanospheres		5 mL	149.00 €	
Appearance: black		10 mL	239.00 €	
		20 mL	399.00 €	



Danger

Packaging in glass bottle

3wt% MWCNT in NMP

DP-0012-HP	[308068-56-6] [872-50-4]			
OD: 10-40 nm		25 g	59.00 €	
L: 5-30 µm		50 g	99.00 €	
Appearance: black		100 g	149.00 €	
		500 g	449.00 €	



Danger

Packaging in glass bottle

Magnetit, highly uniform Nanocubes (1mg/mL in Chloroform)

DP-1112-HP	[1309-38-2]	Fe ₃ O ₄ /CHCl ₃		
APS: 12 nm		1 mL	49.00 €	
PM: cubes		5 mL	149.00 €	
Appearance: black		10 mL	239.00 €	
		20 mL	399.00 €	



Danger

Packaging in glass bottle

Silicon oxide (40wt%, 20 nm) in water

DP-0013-HP	[7631-86-9] [7732-18-5]	TiO ₂ /C ₃ H ₈ O		
APS: 20 nm		25 g	25.00 €	
pH: 10		100 g	59.00 €	
Viscosity: 13 cps		500 g	189.00 €	
		1 kg	295.00 €	



Warning

Packaging in glass bottle

Magnetit, highly uniform Nanospheres + amino groupes (1mg/mL in Water)

DP-1113-HP	[1309-38-2]	Fe ₃ O ₄ /H ₂ O		
APS: 12 nm		1 mL	139.00 €	
PM: nanospheres		5 mL	399.00 €	
Appearance: black		10 mL	699.00 €	
		20 mL	1199.00 €	



Danger

Packaging in glass bottle

Magnetit, highly uniform Nanocubes + amino groupes (1mg/mL in Water)

DP-1114-HP	[1309-38-2]	Fe ₃ O ₄ /H ₂ O		
APS: 12 nm		1 mL	139.00 €	
PM: cubes		5 mL	399.00 €	
Appearance: black		10 mL	699.00 €	
		20 mL	1199.00 €	



Danger

Packaging in glass bottle

Conjugation Kits, Magnetit (1mg/mL in Water) + various ligands, i.e. proteins, peptides, small molecules, polymers and DNA on surface

DP-1115-HP [1309-38-2] Fe₃O₄/H₂O

APS: 12 nm	1 mL	139.00 €
Appearance: black	5 mL	399.00 €
	10 mL	699.00 €
	20 mL	1199.00 €



Danger

Packaging in glass bottle

Magnetit Nanopowder

DP-1116-HP [1309-38-2] Fe₃O₄

APS: 12 nm	1 mg	39.00 €
Appearance: black	5 mg	139.00 €
	10 mg	229.00 €
	20 mg	389.00 €



Danger

Packaging in glass bottle

Further dispersions of specific nanoparticles are available on request

Hazardous symbol	Identification	Description
	GHS01 (EN) Explosive (D) Explosionsgefährlich (FR) Explosif (IT) Esplosivo (ES) Explosivo	Danger: Materials, which can explode under certain conditions. Handling: Avoid impact, shock, friction, sparking and heat.
	GHS02 (EN) Extremely flammable (D) Hochentzündlich (FR) Extrêmement inflammable (IT) Estremamente infiammabile (ES) Extremadamente inflamable	Danger: Selfinflammable materials, easy-inflammable gaseous materials, moisture-sensitive materials or combustible liquid Handling: Avoid contact with ignition source/sources of danger (air, water).
	(EN) Highly flammable (D) Leichtentzündlich (FR) Facilement inflammable (IT) Facilmente infiammabile (ES) Fácilmente inflamable	Danger: Selfinflammable materials, easy-inflammable gaseous materials, moisture-sensitive materials or combustible liquid Handling: Avoid contact with ignition source/sources of danger (air, water).
	GHS03 (EN) Oxidizing (D) Brandfördernd (FR) Comburant (IT) Comburente (ES) Comburente	Danger: Materials, that are able to ignite inflammable materials or to promote broken out fires and thus making fire fighting measures more difficult. Handling: Avoid every contact with inflammable materials.
	GHS06 (EN) Very toxic (D) Sehr giftig (FR) Très toxique (IT) Molto tossico (ES) Muy tóxico	Danger: After inhalation, swallowing or admission by the skin usually health damage of substantial extent or death occurs. Already less than 25 mg per kilogram body weight can lead to death. Handling: Avoid any contact with the human body avoid; in case of indisposition the immediately visit a physician.
	(EN) Toxic (D) Giftig (FR) Toxique (IT) Tossico (ES) Tóxico	Danger: After inhalation, swallowing or admission by the skin usually health damage of substantial extent or death occurs. Already less than 25 mg per kilogram body weight can lead to death. Handling: Avoid any contact with the human body avoid; in case of indisposition the immediately visit a physician.
	GHS08 (EN) Harmful (D) Gesundheitsschädlich (FR) Nocif (IT) Nocivo (ES) Nocivo	Danger: With admission into the body these materials may cause health damage. Handling: Avoid contact with the human body, also inhalation of vapors; in case of indisposition visit a physician.
	GHS07 (EN) Irritant (D) Reizend (FR) Irritant (IT) Irritante (ES) Irritante	Danger: Materials with irritation on skin, eyes and respiratory organs that may cause inflammations. Handling: Do not inhale vapors and avoid contact with skin and eyes.
	GHS05 (EN) Corrosive (D) Ätzend (FR) Corrosif (IT) Corrosivo (ES) Corrosivo	Danger: Living tissue and many materials are destroyed by contact with this chemical. Handling: Do not inhale vapors and avoid contact with skin, eyes and clothes.
	GHS09 (EN) Dangerous for the environment (D) Umweltgefährlich (FR) Dangereux pour l'environnement (IT) Pericoloso per l'ambiente (ES) Peligroso para el medio ambiente	Danger: Release into the environment may cause damage of the ecological system. Handling: Do not dispose in drains, soil or environment depending upon hazard potential. Consider special disposal regulations!

Products and prices 2017

Dangerous Goods



Physical Hazards

H200: Unstable explosive
H201: Explosive; mass explosion hazard
H202: Explosive; severe projection hazard
H203: Explosive; fire, blast or projection hazard
H204: Fire or projection hazard
H205: May mass explode in fire
H220: Extremely flammable gas
H221: Flammable gas
H222: Extremely flammable material
H223: Flammable material
H224: Extremely flammable liquid and vapour
H225: Highly flammable liquid and vapour
H226: Flammable liquid and vapour
H227: Combustible liquid
H228: Flammable solid
H240: Heating may cause an explosion
H241: Heating may cause a fire or explosion
H242: Heating may cause a fire
H250: Catches fire spontaneously if exposed to air
H251: Self-heating; may catch fire
H252: Self-heating in large quantities; may catch fire
H260 In contact with water releases flammable gases which may ignite spontaneously
H261: In contact with water releases flammable gas
H270: May cause or intensify fire; oxidizer
H271: May cause fire or explosion; strong oxidizer
H272: May intensify fire; oxidizer
H280: Contains gas under pressure; may explode if heated
H281: Contains refrigerated gas; may cause cryogenic burns or injury
H290: May be corrosive to metals

Health Hazards

H300: Fatal if swallowed
H301: Toxic if swallowed
H302: Harmful if swallowed
H303: May be harmful if swallowed
H304: May be fatal if swallowed and enters airways
H305: May be harmful if swallowed and enters airways
H310: Fatal in contact with skin
H311: Toxic in contact with skin
H312: Harmful in contact with skin
H313: May be harmful in contact with skin
H314: Causes severe skin burns and eye damage
H315: Causes skin irritation
H316: Causes mild skin irritation
H317: May cause an allergic skin reaction
H318: Causes serious eye damage
H319: Causes serious eye irritation
H320: Causes eye irritation
H330: Fatal if inhaled
H331: Toxic if inhaled
H332: Harmful if inhaled
H333: May be harmful if inhaled
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335: May cause respiratory irritation
H336: May cause drowsiness or dizziness
H340: May cause genetic defects
H341: Suspected of causing genetic defects
H350: May cause cancer
H351: Suspected of causing cancer
H360: May damage fertility or the unborn child
H361: Suspected of damaging fertility or the unborn child
H362: May cause harm to breast-fed children
H370: Causes damage to organs
H371: May cause damage to organs
H372: Causes damage to organs through prolonged or repeated exposure
H373: May cause damage to organs through prolonged or repeated exposure

Environmental hazards

H400: Very toxic to aquatic life
H401: Toxic to aquatic life
H402: Harmful to aquatic life
H410: Very toxic to aquatic life with long lasting effects
H411: Toxic to aquatic life with long lasting effects
H412: Harmful to aquatic life with long lasting effects
H413: May cause long lasting harmful effects to aquatic life

European Union Hazard statements

EUH001: Explosive when dry
EUH006: Explosive with or without contact with air
EUH014: Reacts violently with water
EUH018: In use may form flammable/explosive vapour-air mixture
EUH019: May form explosive peroxides
EUH044: Risk of explosion if heated under confinement
EUH029: Contact with water liberates toxic gas
EUH031: Contact with acids liberates toxic gas
EUH032: Contact with acids liberates very toxic gas
EUH066: Repeated exposure may cause skin dryness or cracking
EUH070: Toxic by eye contact
EUH071: Corrosive to the respiratory tract
EUH059: Hazardous to the ozone layer

EUH201: Contains lead. Should not be used on surfaces liable to be chewed or sucked by children
EUH201A: Warning! Contains lead
EUH202: Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
EUH203: Contains chromium(VI). May produce an allergic reaction.
EUH204: Contains isocyanates. May produce an allergic reaction.
EUH205: Contains epoxy constituents. May produce an allergic reaction.
EUH206: Warning! Do not use together with other products. May release dangerous gases (chlorine).
EUH207: Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer. Comply with the safety instructions.
EUH208: Contains <name of sensitising substance>. May produce an allergic reaction.
EUH209: Can become highly flammable in use.
EUH209A: Can become flammable in use.
EUH210: Safety data sheet available on request.
EUH401: To avoid risks to human health and the environment, comply with the instructions for use

Precautionary Statements

P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P103: Read label before use
P201: Obtain special instructions before use
P202: Do not handle until all safety precautions have been read and understood
P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
P211: Do not spray on an open flame or other ignition source
P220: Keep/Store away from clothing/.../combustible materials
P221: Take any precaution to avoid mixing with combustibles
P222: Do not allow contact with air
P223: Keep away from any possible contact with water, because of violent reaction and possible flash fire
P230: Keep wetted with ...
P231: Handle under inert gas
P232: Protect from moisture
P233: Keep container tightly closed
P234: Keep only in original container
P235: Keep cool
P240: Ground/bond container and receiving equipment
P241: Use explosion-proof electrical/ventilating/light/...equipment
P242: Use only non-sparking tools
P243: Take precautionary measures against static discharge
P244: Keep reduction valves free from grease and oil
P250: Do not subject to grinding/shock/.../friction
P251: Pressurized container – Do not pierce or burn, even after use
P260: Do not breathe dust/fume/gas/mist/vapours/spray
P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P262: Do not get in eyes, on skin, or on clothing
P263: Avoid contact during pregnancy/while nursing
P264: Wash ... thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P271: Use only outdoors or in a well-ventilated area
P272: Contaminated work clothing should not be allowed out of the workplace
P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection
P281: Use personal protective equipment as required
P282: Wear cold insulating gloves/face shield/eye protection
P283: Wear fire/flammable resistant/retardant clothing
P284: Wear respiratory protection
P285: In case of inadequate ventilation wear respiratory protection
P231+232: Handle under inert gas. Protect from moisture
P235+410: Keep cool. Protect from sunlight
P301: IF SWALLOWED:
P302: IF ON SKIN:
P303: IF ON SKIN (or hair):
P304: IF INHALED:
P305: IF IN EYES:
P306: IF ON CLOTHING:
P307: IF exposed:
P308: IF exposed or concerned:
P309: IF exposed or you feel unwell:
P310: Immediately call a POISON CENTER or doctor/physician
P311: Call a POISON CENTER or doctor/physician
P312: Call a POISON CENTER or doctor/physician if you feel unwell
P313: Get medical advice/attention
P314: Get Medical advice/attention if you feel unwell
P315: Get immediate medical advice/attention
P320: Specific treatment is urgent (see ... on this label)
P321: Specific treatment (see ... on this label)
P322: Specific measures (see ... on this label)
P330: Rinse mouth
P331: Do NOT induce vomiting
P332: If skin irritation occurs:
P333: If skin irritation or a rash occurs:
P334: Immerse in cool water/wrap in wet bandages
P335: Brush off loose particles from skin
P336: Thaw frosted parts with lukewarm water. Do not rub affected areas
P337: If eye irritation persists:
P338: Remove contact lenses if present and easy to do. continue rinsing
P340: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P341: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P342: If experiencing respiratory symptoms:
P350: Gently wash with soap and water
P351: Rinse continuously with water for several minutes
P352: Wash with soap and water
P353: Rinse skin with water/shower
P360: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes
P361: Remove/Take off immediately all contaminated clothing
P362: Take off contaminated clothing and wash before reuse
P363: Wash contaminated clothing before reuse
P370: In case of fire:
P371: In case of major fire and large quantities:
P372: Explosion risk in case of fire
P373: DO NOT fight fire when fire reaches explosives
P374: Fight fire with normal precautions from a reasonable distance
P375: Fight fire remotely due to the risk of explosion
P376: Stop leak if safe to do so
P377: Leaking gas fire – do not extinguish unless leak can be stopped safely
P378: Use ... for extinction
P381: Eliminate all ignition sources if safe to do so
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+334: IF ON SKIN: Immerse in cool water/wrap in wet bandages
P302+350: IF ON SKIN: Gently wash with soap and water
P302+352: IF ON SKIN: Wash with soap and water
P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P304+341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. continue rinsing
P306+360: IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes
P307+311: IF exposed: Call a POISON CENTER or doctor/physician
P308+313: IF exposed or concerned: Get medical advice/attention
P309+311: IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician
P332+313: If skin irritation occurs: Get medical advice/attention
P333+313: If skin irritation or a rash occurs: Get medical advice/attention
P335+334: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages
P337+313: Get medical advice/attention
P342+311: Call a POISON CENTER or doctor/physician
P370+376: In case of fire: Stop leak if safe to do so
P370+378: In case of fire: Use ... for extinction
P370+380: In case of fire: Evacuate area
P370+380+375: In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion
P371+380+375: In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion
P401: Store ...
P402: Store in a dry place
P403: Store in a well ventilated place
P404: Store in a closed container
P405: Store locked up
P406: Store in a corrosive resistant/... container with a resistant inner liner
P407: Maintain air gap between stacks/pallets
P410: Protect from sunlight
P411: Store at temperatures not exceeding ... °C/... °F
P412: Do not expose to temperatures exceeding 50 °C/122 °F
P420: Store away from other materials
P422: Store contents under ...
P402+404: Store in a dry place. Store in a closed container
P403+233: Store in a well ventilated place. Keep container tightly closed
P403+235: Store in a well ventilated place. Keep cool
P410+403: Protect from sunlight. Store in a well ventilated place
P410+412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P411+235: Store at temperatures not exceeding ... °C/... °F. Keep cool
P501: Dispose of contents/container to ...

Products and prices 2015

GENERAL TERMS & CONDITIONS



I. General

These General Conditions of Sale and Delivery shall be an integral part of the contract of purchase. Conflicting or deviating conditions of purchase or other reservations made by the Buyer shall not be effective unless the Seller has expressly accepted them in writing for a particular order.

No release of chemicals to private persons, business customers and research institutions only.

II. Offers, Orders

1. The Seller's offers shall not be binding with respect to price, quantity, delivery time and availability. 2. The Buyer's orders shall become binding on the Seller upon receipt by the Buyer of the Seller's written order acknowledgment (or invoice or delivery note).

III. Invoicing

1. The prices invoiced shall be the Seller's prices effective at the time of delivery plus statutory sales tax.

2. Should the Seller, in the interval between conclusion of the contract and delivery, effect a general price increase, the Buyer shall have the right to withdraw from the contract within two weeks of having been informed thereof, unless the price increase is exclusively due to an increase in freight rates. The right of withdrawal shall not apply to long-term supply contracts (contracts for the performance of a continuing obligation).

3. The weight of the goods on which the invoiced amount is to be calculated shall be ascertained in the dispatch department of the Seller's plant from which the goods are supplied unless the Buyer wishes them to be weighed, at his expense, by the railway authorities at the station of dispatch.

IV. Payment

1. The handing in of bills of exchange shall be subject to the Seller's prior consent and shall not constitute payment. The maturity of bills shall not exceed 90 days from the invoice date. Discount expenses, bill charges, bill tax and similar expenses incurred in the period beginning 30 days after the invoice date shall be for the Buyer's account.

2. Where the Seller has reason to doubt the Buyer's solvency or credit worthiness and the Buyer is not prepared to effect advance cash payment or provide the Seller with security as requested, the Seller shall have the right to cancel that portion of the contract which he has not yet performed.

3. Deposits and advance payments shall be made inclusive of sales tax.

4. Payment shall not be deemed to have been effected until the amount has been cleared into one of the Seller's accounts.

5. The Seller reserves the right to use payments for the settlement of the invoices which have been outstanding longer, plus any interest on arrears and costs accrued thereon, in the following order: costs, interest, principal claim.

6. The Buyer shall not have the right to withhold payments. Counterclaims may only be offset if they are uncontested or have become res judicata.

V. Delivery

1. The Seller shall make every effort to effect delivery as early as possible. There shall be no fixed periods for delivery.

2. Should, notwithstanding the preceding paragraph, a fixed period for delivery have been agreed, and should the Seller default with the supply, the Buyer shall grant the Seller a reasonable respite, normally of four weeks.

3. Delivery shall be subject to punctual delivery of the appropriate goods by the Seller's own suppliers.

4. The day of delivery shall be the day on which the goods leave the Seller's plant or warehouse or, if that day cannot be ascertained, the day on which the goods are put at the Buyer's disposal.

5. The provision of packaging including tankers and tank containers by the Seller shall be subject to special conditions.

VI. Force Majeure, Impediments to Performance

Force majeure of any kind, unforeseeable production, traffic or shipping disturbances, fire, floods, unforeseeable shortages of labor, utilities or raw materials and supplies, strikes, lockouts, acts of government, and any other hindrances beyond the control of the party obliged to perform which diminish, delay or prevent production, shipment, acceptance or use of the goods, or make it an unreasonable proposition, shall relieve the party from its obligation to supply or take delivery, as the case may be, as long as and to the extent that the hindrance prevails. If, as a result of the hindrance, supply and/or acceptance is delayed by more than eight weeks, either party shall have the right to cancel the contract. Should the Seller's suppliers fail to supply him in whole or in part, the Seller shall not be under obligation to purchase from other sources. In such cases, the Seller shall have the right to distribute the available quantities among his customers while at the same time taking into account his captive requirements.

VII. Shipment

1. The Seller reserves the right to choose the route and the mode of transport. Any additional costs resulting from special shipping requests made by the Buyer shall be borne by the Buyer. Unless prepaid freight has been agreed, the Buyer shall also bear any increases in freight rates which become effective after the contract has been concluded, any additional costs resulting from re-routing a consignment, storage expenses, etc.

2. The risk of destruction, loss or damage shall pass to the Buyer upon dispatch of the goods or, if they are collected by the Buyer, at the time they are placed at the Buyer's disposal.

VIII. Retention of Title

1. Title to the goods shall not pass to the Buyer until he has fulfilled all liabilities arising from his business connection with the Seller, which shall include settling accessory claims and claims for damages and honoring cheques and bills. Title to the goods shall also remain with the Seller if the Seller's claims have been included in a current account and the balance of this account has been struck and acknowledged.

2. If the Buyer defaults in his obligations to the Seller, the Seller shall have the right, without granting a respite and without cancelling the contract, to demand the return of the goods to which he retains title. Acceptance of the returned goods shall not constitute cancellation of the contract unless the Seller has expressly declared this in. If the Seller cancels the Contract, he shall have the right to demand appropriate compensation for having permitted the Customer to use the item for a certain period.

3. If goods to which the Seller retains title are processed into new products, the Buyer shall be deemed to be effecting such processing on behalf of the Seller without thereby acquiring any claims on the Seller. The Seller's title shall thus extend to the products resulting from the processing. If goods to which title is retained by the Seller are processed together with, mixed with or attached to goods to which title is retained by third parties, the Seller shall acquire co-ownership of the resulting products in the ratio of the invoice value of the goods owned by him to the invoice value of the goods owned by those third parties. If the goods, as a result of such mixing or attaching become part of a principal matter of the Buyer, the Buyer, by accepting these Conditions, assigns in advance his title to the new item to the Seller.

4. The Buyer shall be under obligation to provide, on behalf of the Seller, adequate storage of the goods to which the Seller retains title, to service and repair them at his expense and to insure them at his expense against loss and damage up to an extent which may reasonably be expected of a prudent businessman. By accepting these Conditions the Buyer assigns in advance to the Seller any claims which may accrue to him under the insurance policies.

5. As long as the Buyer duly meets his liabilities to the Seller, he shall have the right, in the normal course of business, to do as he wishes with the goods to which the Seller retains title. This shall not apply, however, if he and his customers have concluded an agreement according to which the Buyer must not assign his claims on them to third parties. The Buyer shall not have the right to pledge, chattel mortgage or otherwise encumber the goods to which the Seller retains title. When reselling the goods, the Buyer shall make the passing of the title subject to full payment of the goods by his customers.

6. By accepting these Conditions, the Buyer assigns in advance to the Seller any claims which may arise from a resale of the goods to which the Seller retains title, together with any incidental rights and security interests including bills of exchange and cheques, so as to provide the Seller with security for all claims he has on the Buyer as a result of the business connection. If goods to which the Seller retains title are sold together with other goods at a single price, the assignment shall be limited to the portion of the invoice value which covers the goods to which the Seller retains title. If the Buyer sells goods of which the Seller has co-ownership pursuant to clause VIII. 3., the assignment shall be limited to the portion of the invoice value which corresponds to the Seller's co-ownership. If the Buyer uses goods to which the Seller retains title for

processing a third party's product on a contract basis, in accepting these Conditions he assigns in advance his contractual claim on the third party to the Seller in order to provide him with security for his claim. As long as the Buyer duly meets his liabilities to the Seller, he may collect claims from a resale or from contract processing himself. He shall not have the right to assign or pledge such claims as security.

7. If the Seller believes his claims to be at risk, the Buyer shall, at the Seller's request, inform his customers of the assignment of his claims to the Seller and supply the Seller with all necessary information and documents.

Any acts of third parties aimed at seizing goods to which the Seller retains title or at appropriating claims assigned to him shall be brought to the Seller's attention by the Buyer immediately.

8. If the value of the security provided to the Seller exceeds the value of the claims to be safeguarded by more than 20 per cent, the Seller shall, at the Buyer's request, bring the excess coverage down to 20 per cent by releasing security of his own choice.

IX. Damages

1. No claims for compensation may be lodged by the Buyer - including those of a non-contractual nature - for any minor negligent breach of duty by the Seller, his executive staff or other agents, unless such breach concerns a duty that is crucial for the object of the contract.

2. The Seller shall only be liable for indirect damage or damage which could not be foreseen at the time of conclusion of the contract if such damage is due to a gross fault on the part of the Seller or one of his managerial employees.

3. The above limitations shall not apply to damage resulting from death, injury or damage to health. However, this shall not affect the applicability of compelling statutory liability regulations such as, for example, liability for the assumption of a guarantee or product liability law.

X. Notification of Defects

1. Notification of defects shall only be recognized if filed in writing within two weeks of receipt of the goods, together with supporting evidence, samples and packing slips, stating the invoice number and date, and the markings on the packaging.

2. Hidden defects must be notified to the Seller immediately upon discovery, but not later than five months after receipt of the goods. This shall not affect the periods of limitation. The burden of proving that a defect is a hidden defect shall rest with the Buyer.

3. Goods forming the subject of a complaint shall not be returned to the Seller except with the Seller's express consent.

XI. Buyer's Rights in the event of Defects

1. Warranty claims made by the Buyer shall only entitle the Buyer to be supplied with a replacement. If the replacement provided by the Seller is also defective, the Buyer may reduce the purchase price or opt to cancel the contract. Claims for damages as defined in Section IX shall remain unaffected by the above. Claims made by the Buyer due to expenses incurred as a result of reworking, in particular transport, travel, labor and material costs, shall be excluded where such expenses have been increased by the fact that the item was subsequently transported to a location other than the premises of the party placing the order, unless the goods were supplied to this location in line with their intended use.

2. In the event of recourse to the guarantee by the Buyer following a successful claim against the latter on the basis of the provisions governing the purchase of a consumer good, the claims under a right of recourse in accordance with the regulations on the purchase of consumer goods shall remain unaffected. Section IX shall apply to any claim for damages.

3. The Buyer must inform the Seller without delay of any case of recourse within the supply chain. Statutory claims under a right of recourse by the Buyer against the Seller shall not apply with respect to arrangements entered into by the Buyer with its customer over and above statutory warranty claims.

4. Any guarantee agreement must be made in writing. A statement of guarantee shall only be effective if it describes the content of the guarantee and the duration and physical scope of guarantee protection in sufficient detail.

XII. Periods of Limitation

In cases that fall under § 438, paragraph 1, no. 3 of the Federal Civil Code (BGB), warranty claims shall expire with effect from one year from the beginning of the statutory period of limitation. In cases that fall under § 438, paragraph 1, no. 2 of the Federal Civil Code (BGB) warranty claims shall expire with effect from two years from the beginning of the statutory period of limitation. Compelling regulations governing the statutory period of limitation or the question of liability, such as, for example, liability for the assumption of a guarantee, liability for willful intent and gross negligence, for death, physical injury or damage to health, for the violation of essential contractual obligations, liability in accordance with the product liability law and the provisions relating to the sale of consumer goods shall remain unaffected.

XIII. Properties of Goods, Technical Support, Use and Processing

1. The properties of the goods shall as a general rule only include the properties as stated in the product descriptions, specifications and labeling of the Seller. Public statements, claims or advertising shall not be classed as information on the properties of the item for sale.

2. Technical advice provided by the Seller verbally, in writing or by way of trials is given in good faith but without warranty, and this shall also apply where proprietary rights of third parties are involved. The Seller's technical advice shall not release the Buyer from the obligation to test the products supplied by the Seller as to their suitability for the intended processes and uses. The application, use and processing of the products are beyond the Seller's control and therefore entirely the Buyer's responsibility.

XIV. Trademarks

1. The Buyer shall not have the right to refer to the Seller's products when offering or supplying substitute products or, in price lists or similar business communications, to use the word "substitute" in conjunction with the Seller's - protected or unprotected product designations or list these designations together with any designations for substitute products.

2. When using the Seller's products for manufacturing purposes or when processing them into new products, the Buyer shall not have the right, without the Seller's prior consent, to use the Seller's product designations, especially his trademarks, on the resulting products or on the packaging therefore or in any relevant printed matter or advertising literature, particularly by mentioning the Seller's products as components of his own products. The supply of goods under a trademark shall not be deemed agreement to the use of this trademark for the products manufactured therefrom.

XV. Place of Performance and Jurisdiction, Invalidity of Individual Clauses

1. Place of performance for delivery shall be the Seller's dispatch department; place of performance for payment shall be "Heilbronn".

2. Place of jurisdiction for both parties shall be Heilbronn. The Seller shall furthermore have the right to sue the Buyer at the Buyer's general place of jurisdiction.

3. Should any clause in these General Conditions of Sale and Delivery be or become invalid, this shall not affect the validity of the remaining clauses or remaining parts of the clause concerned. The parties shall replace any invalid arrangement by an effective one which conforms as far as possible to the economic purpose of the invalid clause.

Heilbronn, June 2010