

BAM Certified Reference Materials Price list

date 2012-02-03

General

Please send your purchase order for BAM-CRMs to:

BAM Bundesanstalt für Materialforschung und –prüfung
Fachbereich 1.6
Richard-Willstaetter-Str. 11
12489 Berlin

phone: +49 30 8104-2061 **fax:** +49 30 8104-1117
email: sales.crm@bam.de
webshop: <http://www.webshop.bam.de>

Terms of Delivery

Prices include transport service by mail.

Terms of Delivery: free delivery:

BAM usually delivers via DHL. If another courier or carrier etc. is desired, then the customer bears the costs at the point of destination. BAM will assume no further costs.

Orders shipping to destinations outside Europe or bulky parcels is charged additionally (flat rate is deducted).

Your products will be packed and shipped asap. Shipment will be performed by standard mail service. Duration of mail delivery cannot be guaranteed by BAM because of different national delivery services.

Iron and steel products

EURONORM certified reference materials

CRM	Unit issued	Price (per unit)
D ECRM chips, powder	100 g	114,00 €
D ECRM 026-1 to 029-1 rods (Ø 10mm x ~9cm)	100 g	95,00 €
D ECRM 030-4 to 032-1 chips	100 g	108,00 €
D ECRM 035-2 powder	100 g	120,00 €
D ECRM 036-1 to 042-1 chips	100 g	108,00 €
D ECRM 126-1 to 130-1 chips	100 g	108,00 €
D ECRM 129-3, 179-2, 187-2 chips 191-2	100 g	120,00 €
D ECRM 226-1 or 227-1 chips	100 g	108,00 €
D ECRM 231-2, 271-1, 284-2 chips	100 g	120,00 €
D ECRM 294-1, 297-1, 299-1 chips	100 g	120,00 €
D ECRM 235-1 or 237-1 chips	100 g	108,00 €
D ECRM 326-1 to 328-1 chips	100 g	108,00 €
D ECRM 529-1 powder	100 g	108,00 €
D ECRM 627-2 to 633-1 powder	100 g	108,00 €
D ECRM 678-1 to 686-1 powder	100 g	114,00 €
D ECRM 687-1 small globules	100 g	114,00 €
D ECRM 826-1 or 827-1 powder	100 g	95,00 €
D-ECRM solid sample, disc	Ø 35-39 mm x 20-35 mm	210,00 €
D ECRM 035-2, 129-3, 179-2 solid sample, disc	Ø 35-39 mm x 20-35 mm	220,00 €
D ECRM 191-2 solid sample, disc	Ø 38 mm x 22 mm	173,00 €
D ECRM 271-1, 284-2, 294-1 solid sample, disc	Ø 35-39 mm x 20-35 mm	220,00 €
D ECRM 297-1, 299-1 solid sample, disc	Ø 35-39 mm x 20-35 mm	220,00 €
D ECRM 099-1 balls	100 g	210,00 €
Set (026-1, 026-2, 027-1, 028-1, 029-1) rods (Ø10mm x ~9cm)	100 g	330,00 €
⁶⁰ Co-Gamma-control samples set	Ø 35 mm x 11 mm	1200,00 €

EURONORM certified reference materials

CRM		Unit issued	Price (per unit)
B-ECRM	chips, powder	100 g	135,00 €
B-ECRM 090-1	chips	100 g	155,00 €
F-ECRM	chips, powder	100 g	145,00 €
F-ECRM 378-1	chips	100 g	325,00 €
F-ECRM 485-2-1 to 491-1	chips	100 g	160,00 €
F-ECRM 485-3	chips	100 g	155,00 €
F-ECRM 492-1	chips	100 g	145,00 €
S-ECRM 197-1 to 882-1	chips, powder	100 g	215,00 €
B-ECRM 884-1	powder	100 g	155,00 €
B-ECRM	disc	Ø 35-39 mm x 20-35 mm	265,00 €
B-ECRM 090-1	disc	Ø 38 mm x 20-35 mm	280,00 €
F-ECRM	disc	Ø 35-39 mm x 20-35 mm	265,00 €
F-ECRM 377-1 or 377-2	disc	Ø 40 mm x 20 mm	520,00 €
F-ECRM 378-1	disc	Ø 40 mm x 20 mm	590,00 €
S-ECRM 196-1 to 379-1	disc	Ø 38 mm x 25 mm	260,00 €

Setting-up samples for spectrometric analysis

CRM		Unit issued	Price (per unit)
SUS-1 R BAM	cylinder	Ø 50 mm x 42 mm	108,00 €

Non-ferrous metals

CRM		Unit issued	Price (per unit)
Copper, copper alloys	chips	100 g	135,00 €
Copper, copper alloys,	disc	Ø 40 mm x 30 mm	243,00 €
Copper alloy; ERM [®] -EB389	disc	Ø 40 mm x 30 mm	263,00 €
Copper (set BAM-373/1,2 + 3)	disc	Ø 50 mm x 30 mm	243,00 €
Copper (set BAM-379/1,2 + 3)	disc	Ø 40 mm x 30 mm	313,00 €
Copper BAM-379/1, 2 or 3	disc	Ø 40 mm x 30 mm	133,00 €
Copper BAM-M390, M391 or M392	disc	Ø 40 mm x 30 mm	209,00 €
Aluminium	chips	100 g	87,00 €
Aluminium	disc	Ø 60 mm x 25 mm	218,00 €
Aluminium	disc	Ø 50 mm x 30 mm	235,00 €
Lead	disc	Ø 50 mm x 30 mm	193,00 €
Lead (ERM [®] -EB101a + 102a)	disc	Ø 40 mm x 40 mm	209,00 €
Lead (ERM [®] -EB103)	disc	Ø 40 mm x 30 mm	209,00 €
Lead (ERM [®] -EB104-106)	disc	Ø 40 mm x 40 mm	158,00 €
Tin Solder granulated powder		100 g	134,00 €
BAM-501, potassiumdicyanoaurate(I)		6 g	233,00 €
BAM-M601 zinc	disc	Ø 45 mm x 30 mm	193,00 €

Special materials

CRM	Unit issued	Price (per unit)
ERM [®] -ED101 (BAM-S001) silicon nitride powder	50 g	233,00 €
ERM [®] -ED102 boron carbide powder	100 g	237,00 €
ERM [®] -ED103 boron nitride powder	50 g	249,00 €
BAM-S002 tungsten metal powder	100 g	203,00 €
BAM-S003 silicon carbide powder	50 g	193,00 €
BAM-S004 glass containing Cr-(VI) pieces < 10 mm	50 g	143,00 €
BAM-S005A multielement glass	Ø 39 mm x 5 mm 26 g - 30 g	153,00 €
BAM-S005B multielement glass	Ø 39 mm x 5 mm 26 g - 30 g	193,00 €
ERM [®] -EB504 Pt, Pd + Rh in used car catalyst powder	250 g	459,00 €
BAM-H010 Pb, Br, Cd, Cr, (Hg) in acrylonitrile- butadiene-styrene (ABS) granular material	100g	250,00 €
BAM-H010 Pb, Br, Cd, Cr, (Hg) in acrylonitrile- butadiene-styrene (ABS) discs	Ø 40 mm x 1 mm Ø 40 mm x 2 mm Ø 40 mm x 6 mm	100,00 € 100,00 € 100,00 €
set (1+2+6 mm)		250,00 €

Pure materials

CRM	Unit issued	Price (per unit)
SiO ₂ , Al ₂ O ₃ , CaCO ₃ , NiO, MgO, powder	100 g	200,00 €
Ni, chips	100 g	200,00 €

Environment

CRM		Unit issued	Price (per unit)
CRM 5001,	oil	2 ampoules per 16 g	165,00 €
BAM-K010,	oil	5 g (ca. 7 mL)	98,00 €
BAM-K008,	oil	7 mL	73,00 €
BAM-K009,	oil	7 mL	73,00 €
ERM [®] -CC007a,	soil	103 g	175,00 €
ERM [®] -CC008 (BAM-U008),	soil	30 g	145,00 €
ERM [®] -CC009 (BAM-U009),	soil	30 g	145,00 €
ERM [®] -CC010 (BAM-U010),	soil	5,7 g	90,00 €
ERM [®] -CC011 (BAM-U011),	soil	4,2 g	90,00 €
ERM [®] -CC012 (BAM-U012),	soil	6,5 g	90,00 €
ERM [®] -CC013a	soil	81 g	198,00 €
ERM [®] -CC016	waste	83 g	139,00 €
ERM [®] -CC017	soil	81 g	180,00 €
ERM [®] -CC018	soil	55 g	235,00 €
ERM [®] -CC020	river sediment	52 g	200,00 €
ERM [®] -CD100	wood	74 g	235,00 €
BAM-U015b	sediment	73 g	192,00 €
BAM-U019	soil	106 g	257,00 €
BAM-U110	soil	60 g	263,00 €
BAM-U111	sandy soil	43 g	178,00 €
BAM-U112	sandy soil	52 g	200,00 €
BAM-U113	sandy loam	40 g	175,00 €
Set ERM [®] -BD272 and ERM [®] -BD274		68 g and 48 g	265,00 €
ERM [®] -EF213	S in petrol	19 mL	123,00 €

These reference materials ERM[®]-EF211, ERM[®]-EF212 and ERM[®]-EF213 are sold as a set of three or individually through:

LGC Promochem (UK)
 phone: +44 (0)20 8943 8480
 email: askus@lgcpromochem.com

LGC Promochem GmbH (Germany) (ERM[®]-EF212)
 phone: +49 (0)281 9887 0
 email: de@lgcpromochem.com

or individually from the certifying institutes at:

IRMM, email: jrc-irmm-rm-sales@ec.europa.eu
BAM, email: sales.crm@bam.de

(ERM[®]-EF211) and
 (ERM[®]-EF213)

Food

CRM		Unit issued	Price (per unit)
ERM [®] -BD272	crispbread	68 g	165,00 €
ERM [®] -BD274	rusk	48 g	154,00 €
ERM [®] -BD475	roasted coffee	64 g	185,00 €
ERM [®] -BD476	red wine	51 mL	125,00 €
ERM [®] -BC600	Fusarium mycotoxins in wheat flour	81 g	255,00 €
Set: 68 g ERM [®] -BD272 + 48 g ERM [®] -BD274		116 g	265,00 €

BAM quality control samples

(aqua regia extractable elements in soils and sediments)

sample #	(raw material)	grain sizes	mass per unit	price
BRM#01	(silty soil)	$\leq 200 \mu\text{m}$	$(50 \pm 1) \text{ g}$	105,00 €
BRM#03	(loamy soil)	$\leq 100 \mu\text{m}$	$(31 \pm 1) \text{ g}$	80,00 €
BRM#06a	(mixed loamy soil)	$\leq 63 \mu\text{m}$	$(50 \pm 1) \text{ g}$	133,00 €
BRM#06b	(mixed loamy soil)	$\leq 63 \mu\text{m}$	$(50 \pm 1) \text{ g}$	133,00 €
BRM#06c	(mixed loamy soil)	$\leq 63 \mu\text{m}$	$(50 \pm 1) \text{ g}$	133,00 €
BRM#09a	(fine-sandy soil)	$\leq 125 \mu\text{m}$	$(51 \pm 1) \text{ g}$	123,00 €
BRM#09b	(fine-sandy soil)	$\leq 125 \mu\text{m}$	$(51 \pm 1) \text{ g}$	123,00 €
BRM#10a	(river sediment)	$\leq 125 \mu\text{m}$	$(51 \pm 1) \text{ g}$	108,00 €
BRM#10b	(river sediment)	$\leq 125 \mu\text{m}$	$(51 \pm 1) \text{ g}$	108,00 €
BRM#12	(mixed sandy soil)	$\leq 63 \mu\text{m}$	$(44 \pm 1) \text{ g}$	115,00 €
BRM#13	(mixed sandy soil)	$\leq 125 \mu\text{m}$	$(52 \pm 1) \text{ g}$	133,00 €

Gas mixtures

1. CRGMs

The certified reference gas mixtures (CRMs) are prepared by BAM or industrial partners under mandate of BAM.

Prices are available on request
email: michael.maiwald@bam.de

2. Certification offer

Certification of calibration gas mixtures prepared by customers and accepted by BAM

Binary certified reference gas mixtures

CRM	Range of molar fraction mol/mol	Uncertainty level % rel	Price (per unit)
BAM-G010	0,05 - 0,5	0,5	500,00 €
		1,0	400,00 €
BAM-G012	0,05 - 0,5	0,5	500,00 €
		1,0	400,00 €
BAM-G014	0,05 - 0,5	0,5	500,00 €
		1,0	400,00 €
BAM-G020	0,05 - 0,2	0,5	500,00 €
		1,0	400,00 €
BAM-G024	0,05 - 0,5	0,5	500,00 €
		1,0	400,00 €
BAM-G030	0,01 - 0,2	0,5	400,00 €
		1,0	250,00 €
BAM-G039	0,01 - 0,2	0,5	400,00 €
		1,0	250,00 €
BAM-G040	0,01 - 0,1	0,3	500,00 €
		1,0	250,00 €
BAM-G042	0,0001 - 0,01	0,5	500,00 €
		1,0	300,00 €
BAM-G050	0,01 - 0,5	0,3	500,00 €
		1,0	250,00 €
BAM-G020	0,01 - <0,05	0,8	500,00 €
		2,0	300,00 €
BAM-G012	0,005 - <0,05	0,8	500,00 €
		2,0	300,00 €
BAM-G040	0,0001 - <0,001	0,5	500,00 €
		1,0	300,00 €
BAM-G050	0,0001 - <0,001	0,5	600,00 €
		1,0	500,00 €
BAM-G039	0,01 - 0,2	2,0	250,00 €
		2,0	400,00 €
BAM-G040	0,01 - 0,1	2,0	250,00 €
		2,0	400,00 €
BAM-G050	0,0001 - <0,001	2,0	250,00 €
		2,0	400,00 €

Binary certified reference gas mixtures

CRM	Range of molar fraction mol/mol	Uncertainty level % rel	Price (per unit)
BAM-G052	0,01 - 0,20	0,3	500,00 €
		1,0	250,00 €
	0,0001 - <0,01	0,5	500,00 €
		1,0	300,00 €
		2,0	250,00 €
BAM-G055	0,005 - 0,10	0,5	500,00 €
BAM-G060	0,01 - 0,5	0,3	500,00 €
		1,0	300,00 €
	0,0001 - <0,01	0,5	500,00 €
		1,0	300,00 €
		2,0	250,00 €
	0,00001 - <0,0001	0,5	600,00 €
1,0		500,00 €	
2,0		400,00 €	
BAM-G062	0,0001 - 0,001	0,5	500,00€
		1,0	300,00€
BAM-G070	0,001 - 0,01	0,5	500,00 €
		2,0	250,00 €
	0,00005 - <0,001	1,0	400,00 €
		2,0	300,00 €
BAM-G072	0,0001 - 0,001	0,5	500,00€
		1,0	300,00€
BAM-G080	0,0005 - 0,001	0,8	400,00 €
		2,0	250,00 €
	0,0001 - <0,0005	2,0	400,00 €
BAM-G090	0,0001 - 0,001	0,5	500,00 €
		1,0	300,00 €
		2,0	250,00 €
	0,00001 - <0,0001	1,0	400,00 €
		2,0	300,00 €
	0,000005 - <0,00001	2,0	400,00 €
BAM-G100	0,0001 - 0,001	0,5	1000,00 €
		1,0	650,00 €
		2,0	350,00 €

Multi component certified reference gas mixtures

CRM	Uncertainty level % rel.	Price (per unit)
BAM-G501	0,5	550,00 €
BAM-G530	0,5	600,00 €
BAM-G610	2,0	300,00 €
BAM-G810	1,0	on request

Certified reference gas mixtures for vehicle exhaust emission measurement

CRM	Price (per unit)
BAM-G200	500,00 €
BAM-G210	500,00 €
BAM-G220	800,00 €
BAM-G225	750,00 €
BAM-G230	700,00 €

Certified reference gas mixtures for gas calorimeters

CRM	Price (per unit)
BAM-G300	500,00 €
BAM-G310	500,00 €
BAM-G320	500,00 €
BAM-G330	500,00 €
BAM-G340	500,00 €
BAM-G350	500,00 €
BAM-G360	800,00 €

Certified reference gas mixtures for process gas chromatographs

CRM	Uncertainty level % rel	Price (per unit)
BAM-G400	≤ 1	1300,00 €
(6H)	1 - 2	1100,00 €
BAM-G401	≤ 1	1300,00 €
(6L)	1 - 2	1100,00 €
BAM-G410	≤ 1	1800,00 €
(L1-8K)	1 - 2	1500,00 €
BAM-G411	≤ 1	1800,00 €
(L2-8K)	1 - 2	1500,00 €
BAM-G412	≤ 1	1800,00 €
(H1-8K)	1 - 2	1500,00 €
BAM-G413	≤ 1	1800,00 €
(H2-8K)	1 - 2	1500,00 €
BAM-G420	≤ 1	2300,00 €
(11M)	1 - 2	1900,00 €
BAM-G421	≤ 1	2300,00 €
	1 - 2	1900,00 €
BAM-G430	≤ 1	2300,00 €
(11D)	1 - 2	1900,00 €
BAM-G431	≤ 1	2300,00 €
(H1-11K)	1 - 2	1900,00 €
BAM-G432	≤ 1	2300,00 €
(H2-11K)	1 - 2	1900,00 €
BAM-G433	≤ 1	2300,00 €
(H3-11K)	1 - 2	1900,00 €
BAM-G434	≤ 1	2300,00 €
(L1-11K)	1 - 2	1900,00 €
BAM-G435	≤ 1	2300,00 €
	1 - 2	1900,00 €
BAM-G436	≤ 1	2300,00 €
(L2-11K)	1 - 2	1900,00 €
BAM-G437	≤ 1	2300,00 €
	1 - 2	1900,00 €
BAM-G438	≤ 1	2300,00 €
	1 - 2	1900,00 €
BAM-G440	≤ 1	3100,00 €
(16M)	1 - 2	2500,00 €
BAM-G450	≤ 1	3350,00 €
(17K)	1 - 2	2700,00 €
BAM-G460	≤ 1	2500,00 €
	1 - 2	2100,00 €

Certified reference gas mixtures for process gas chromatographs

CRM	Uncertainty level % rel	Price (per unit)
BAM-G490	$\leq 0,5$ 1 - 2	1500,00 € 1300,00 €
BAM-G491	≤ 1 1 - 2	1500,00 € 1300,00 €
BAM-G492	≤ 1 1 - 2	1500,00 € 1300,00 €
BAM-G496	≤ 1 1 - 2	2300,00 € 1900,00 €
BAM-G497	≤ 1 1 - 2	2300,00 € 1900,00 €
BAM-G901	0,5 - 0,3	500,00 €

(The "CRM-No." in parenthesis corresponds to the name used in sheet "PTB-A 7.63" by Physikalisch Technische Bundesanstalt (PTB).)

Elastomeric materials

CRM		Unit issued	Price (per unit)
BAM-E001	Rubber test sheet DIN 53516 and ISO 4649 Annex B.2 (reference compound no.1)	8 mm x 186 mm x 186 mm, 380 g	85,00 €
BAM-E002	Abrasive paper sheet DIN 53516 and ISO 4649	402 mm x 474 mm, 210 g	39,00 €
BAM-E003	Rubber test sheet ISO 4649 Annex B.3 (reference compound no.2)	8 mm x 186 mm x 186 mm, 340 g	123,00 €
BAM-E004	Rubber sole sheet for measuring the electrostatic charging of floor by a walking test	3 mm x 120 mm x 345 mm, 155 g	83,00 €
BAM-E005	Rubber base ring according to Moore	Ø 88 mm, 140 g	123,00 €
BAM-E006	Rubber slider (SRT, skid resistance test)	10 mm x 25 mm x 76 mm, 35 g	71,00 €
BAM-E007	Rubber slider (PSV, polished stone value)	10 mm x 25 mm x 32 mm, 15 g	83,00 €
BAM-E008	Elastomer ISO 13226 SRE-NBR 28/PX	2 mm x 186 mm x 186 mm, 87 g	59,00 €
BAM-E009	Elastomer ISO 13226 SRE-NBR 28/SX)	2 mm x 186 mm x 186 mm, 87 g	59,00 €
BAM-E010	Elastomer ISO 13226 SRE-NBR 34/SX	2 mm x 186 mm x 186 mm, 87 g	59,00 €
BAM-E011	Elastomer ISO 13226 SRE-HNBR/1X	2 mm x 186 mm x 186 mm, 87 g	61,00 €
BAM-E012	Elastomer ISO 13226 SRE-ACM/1X	2 mm x 186 mm x 186 mm, 87 g	59,00 €
BAM-E013	Elastomer ISO 13226 SRE-VMQ/1X	2 mm x 186 mm x 186 mm, 85 g	59,00 €
BAM-E014	Elastomer ISO 13226 SRE-FKM/2X / ISO 6072 FKM 2	2 mm x 186 mm x 186 mm, 125 g	61,00 €
BAM-E015	Elastomer ISO 6072 NBR 1	2 mm x 186 mm x 186 mm, 87 g	59,00 €
BAM-E016	Elastomer ISO 6072 NBR 2	2 mm x 186 mm x 186 mm, 87 g	59,00 €
BAM-E017	Elastomer ISO 13226 SRE-NBR/L	2 mm x 186 mm x 186 mm, 82 g	59,00 €
BAM-E018	Elastomer ISO 13226 SRE-NBR/M	2 mm x 186 mm x 186 mm, 82 g	59,00 €
BAM-E019	Elastomer ISO 6072 EPDM 1	2 mm x 186 mm x 186 mm, 74 g	59,00 €
BAM-E020	Elastomer ISO 6072 HNBR 1	2 mm x 186 mm x 186 mm, 82 g	61,00 €
BAM-E021	Elastomer ISO ISO 13226 SRE-CR/1	2 mm x 186 mm x 186 mm, 93 g	61,00 €

Tribological reference test sample for the SRV0 test machine

Audi 1,9 TDI R4 cast iron	20 mm x 12 mm x 5,5 mm
Silitec M 112	20 mm x 12 mm x 5,5 mm
V6 LaCrosse	20 mm x 12 mm x 5,5 mm
M 107 (GGL26Cr)	20 mm x 12 mm x 5,5 mm
FIAT 1,9 JTD cast iron	20 mm x 12 mm x 5,5 mm
Porsche V8 Alusil (AlSi17Cu4Mg)	20 mm x 12 mm x 5,5 mm

The test samples are sold by Optimol Instruments Prueftechnik GmbH,
Westendstr. 125, DE-80339 Munich (Germany)

<http://www.optimol-instruments.de>

Optical properties

Test colour sets for specifying colour reproduction

CRM	Set	Test colour samples	Price (per unit)
BAM-V003	ISO/CIE + DIN	14 +3	969,00 €
	EBU	21-26	561,00 €
	T14	23	1428,00 €
	EBU/CAM	15	892,50 €
	Grey	6	561,00 €

Materials with integral optical properties

CRM	Size of the material	Price (per unit)
BAM-V001	about 100mm x 100mm	from 204,00 €
BAM-V002	about 100mm x 100mm	depending on the special conditions from 204,00 €

Materials with spectral optical properties

CRM	Size of the material	Price (per unit)
BAM-V004/5	50 mm x 50 mm	382,50 €
BAM-V006	50 mm x 50 mm	1224,00 €
BAM-V007	50 mm x 50 mm	459,00 €
BAM-V008	50 mm x 50 mm	331,50 €

X-ray film step tablet

Price available on request: email: hans-joachim.malitte@bam.de

Photometric and colorimetric reference materials

ISO/IEC- and DIN-test charts for colour image reproduction, colour workflow and colour management

The size of the material is DIN A4.

The price of 1 CRM is 50,00 € and of 4 CRMs is 150,00 €

Calibration kit spectral fluorescence standards

The CRMs BAM-F001 to BAM-F005 are sold by Sigma-Aldrich Co
<http://www.sigmaaldrich.com/>

contact: Dr. Monika Bäumle / Product Manager Biochemistry
Sigma-Aldrich Production
Industriestr. 25
CH-9470 Buchs SG / Switzerland
email: Monika.Baeumle@sial.com
phone: +41 81 755 2665 / mobile phone: +41 79 758 0476

Porous reference materials

CRM		Unit issued	Price (per unit)
BAM-PM-101	powder	10 g	163,00 €
BAM-PM-102	powder	10 g	163,00 €
BAM-P105	granular material	10 g	195,00 €
ERM [®] -FD107 (BAM-P107)	pellets ~ Ø 1,8 mm	10 g	363,00 €
BAM-P108	beads ~ Ø 500 µm	10 g	203,00 €
BAM-P109	beads ~ Ø 250 – 500 µm	10 g	270,00 €
ERM [®] -FD120 (BAM-PM-120)	beads ~ Ø 900 µm	15 g	393,00 €
ERM [®] -FD121 (BAM-PM-121)	beads ~ Ø 55 µm	12 g	263,00 €
ERM [®] -FD122 (BAM-PM-122)	beads ~ Ø 90 µm	10 g	213,00 €
ERM [®] -FD123 (BAM-P123)	10 mm x 20 mm	6 filter tubes	158,00 €
BAM-P124	9 mm x 19 mm	6 flat membrane	183,00 €
BAM-P125	9 mm x 19 mm	6 flat membrane	183,00 €
BAM-P126	9 mm x 19 mm	6 flat membrane	183,00 €
BAM-P127	beads ~ Ø 1 mm	10 g	415,00 €

Layer and surface reference materials

Material for thin layer and surface analytical methods

CRM	Size of the material	Price (per unit)
ERM [®] -EG001 (BAM-L001/IRMM-302)	1 cm x 1 cm x 0,05 cm	1050,00 €
BAM-L200	10,8 mm x 4 mm x approx.5 mm	488,00 €

Materials for thin film and surface technology

CRM	Layer		Substrate		Price (per unit)
	material	nominal layer thickness [nm]	material	dimensions [mm]	
BAM-L100	Ti/Al multilayer	5 x (100/250)	100Cr6 steel	Ø 30 x 5	393,00 €
BAM-L101	TiO ₂ /SiO ₂ multilayer	5 x (100/100)	BK7 glass	30 x 30 x 1	393,00 €
BAM-L102	TiN single layer	2500	100Cr6 steel	Ø 30 x 5	393,00 €
BAM-L103	VN single layer	2500	100Cr6 steel	Ø 30 x 5	393,00 €
BAM-L104	TiC single layer	2500	100Cr6 steel	Ø 30 x 5	393,00 €
BAM-L105	VC single layer	2500	100Cr6 steel	Ø 30 x 5	393,00 €

Test material and software for the performance check of an X-ray spectrometer attached to a SEM

CRM	Size of the material	Price (per unit)
EDS-TM001	6.5 mm x 6.5 mm x 5.0 mm	135,00 €
EDS-TM001 with software, CD-ROM (in German)	6.5 mm x 6.5 mm x 5.0 mm	288,00 €

Contact:

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Polymeric reference materials

The CRMs "ERM[®]-FA001" to "ERM[®]-FA008" (BAM-P001 to BAM-P008) are produced and sold by Fa.Polymer Standards Service GmbH (PSS)

Postfach 3368
55023 Mainz

contact: Dr. Thorsten Hofe

phone: +49 (0) 6131 96239 0
fax: +49 (0) 6131 96239 11
email: PSS_info@polymer.de

They are distributed in packaging sizes of 1, 2, 5 and 10 g.

The CRMs "BAM-P011" and "BAM-P012" are sold by BAM.

BAM Bundesanstalt für Materialforschung und -prüfung
Division 1.3

Dr. Steffen Weidner
Richard-Willstätter-Str. 11
12489 Berlin

phone: +49 30 8104-1633
fax: +49 30 8104-1137
email: steffen.weidner@bam.de

CRM	Size of the material	Price (per unit)
BAM-P011; BAM-P012 pellets	1 g	70,00 €
	2 g	130,00 €
	5 g	300,00 €
	10 g	505,00 €

Isotopic reference materials

Material certified for the isotopic composition of boron

CRM	Size of the material	Price (per unit)
ERM [®] -AE101 (BAM-I001)	30 mL	353,00 €
ERM [®] -AE102 (BAM-I002)	30 mL	353,00 €
ERM [®] -AE102a	20 mL	353,00 €
ERM [®] -AE103 (BAM-I003)	30 mL	353,00 €
ERM [®] -AE104 (BAM-I004)	30 mL	353,00 €
ERM [®] -AE104a	20 mL	353,00 €
ERM [®] -AE120	20 mL	95,00 €
ERM [®] -AE121	20 mL	95,00 €
ERM [®] -AE122	20 mL	95,00 €

Primary pure substances

CRM	Form of material	Size of the material	Price (per unit)
BAM-Y001	compact material	0,5 g	403,00 €
BAM-Y002	compact material	0,5 g	403,00 €
BAM-Y003	cubes 3×3×3 mm	0,5 g	403,00 €
BAM-Y004	compact material	0,5 g	403,00 €
BAM-Y005	compact material	0,5 g	403,00 €
BAM-Y006	compact material	0,5 g	403,00 €
BAM-Y007	compact material	0,5 g	403,00 €
BAM-Y008	compact material	0,5 g	403,00 €
BAM-Y009	crystalline powder	0,5 g	403,00 €
BAM-Y010	crystalline powder	0,5 g	403,00 €

They are available only to the signatories (National Measurement Institutes) and designated laboratories as listed in the Mutual Recognition Arrangement MRA

<http://www.bipm.org/en/convention/mra/>