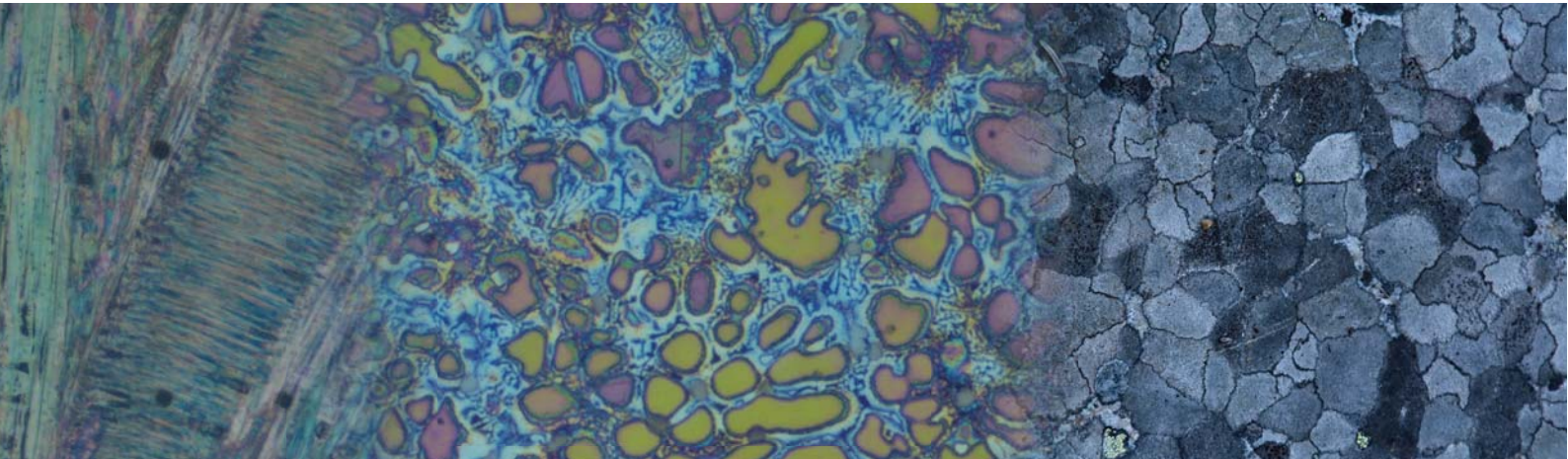




Cloeren Technology
good to know



Catalogue 2020

Materialography supplies Preparation systems

Materialography supplies and Preparation systems

About us



About us	4 - 5
Your contact partners	6 - 7
Innovations	8
CT UltraVilibo Technologies	10 - 11
Foreign representative	69
Conditions	70
Order form	71

Cutting



Cut-off wheels	12
Diamond- and CBN cut-off wheels	14
Cutting additives	15
Accessories	55

Embedding



Warm embedding material	16
Cold embedding material	18
Epoxy resins	21
Embedding moulds	23
Embedding aids	25
Accessories	55

Mobile Materialogr.



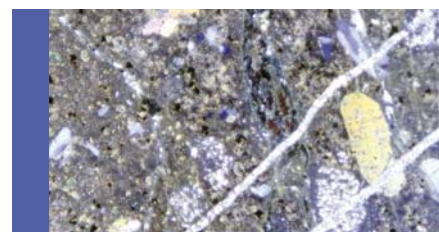
Transportable rechargeable grinding and polishing unit	58
Accessories	58
Surface reprint mass	60

Microscopy



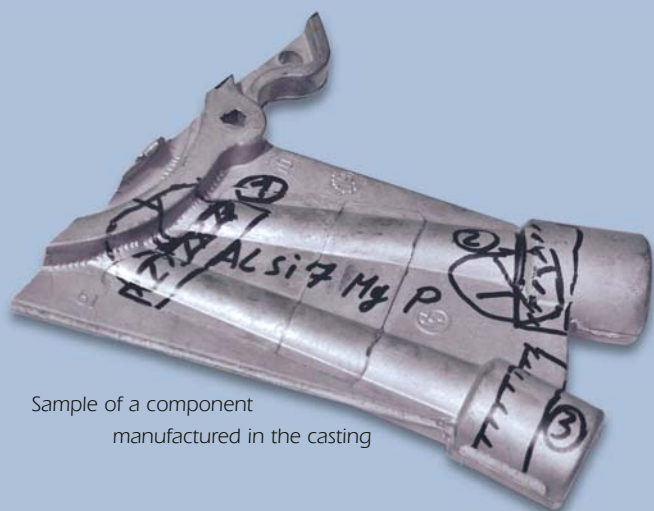
Accessories	61
-------------	----

Thin section tech.



Glass slides	62
Accessories	63

Concepts for your sample preparation



Sample of a component manufactured in the casting

Free: We prepare your sample.

Would you like to know how your material sample is prepared materialographically? With pleasure. Send us your material sample.

Let us know what is important to you. Maybe on the preparation for a degree of purity? Or which etching process is suitable to make certain microstructures visible?

Anyway, we develop a free materialographic preparation concept for you.

Would you like to try out the preparation concept developed in your laboratory? Set it up on your machines and we will send you a test package with the consumables used.

Example of a task

Question: How should this component made of the AlSi7MgP alloy (picture left / a cast alloy) be prepared materialographically so that the structure becomes visible? The areas required for sampling are marked.

Your guide: the preparation protocol

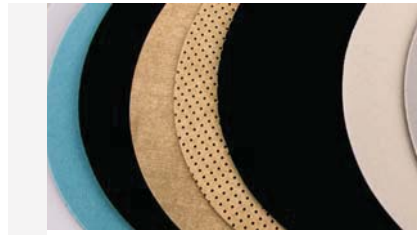
After our laboratory has worked on your sample, you will receive a preparation concept. This way you know about the specific procedure to be able to present the structure of your samples consistently.

Grinding



Adapter disks	26
Diamond surf. grind. disks	28
Diamond surface and fine grinding disks	30
Wet abrasive papers	31
Grinding stones	34
Disk-storage-boxes	34
Accessories	55

Polishing



Lapping and Polishing disks	35
Polishing cloths	36
Diamond polishing agents	44
Lubricants	47
Final polishing agents	52
Accessories	56

Cleaning / Etching



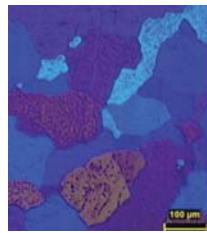
Cleaning agents / Solvents	53
Etching agents	53
Accessories	57

Further training



Trainings	9
Literature	68

Tips & Tricks



Trennen	
Einbetten	
Schleifen und Polieren	
Schleifen 1	
Unterlage	SiC-Papier
S/P- Mittel	SiC
Korngröße	P120/120 µm
Schmiermittel	Wasser
Umdrehung	300 U/min.
Druck / N	30
Zeit / Minuten	bis plan

Parameters of warm embedding materials	64
Preparation samples	66

Not found here what you are looking for?

Please talk to us about your product requirements if you cannot find what you are looking for in this catalogue.

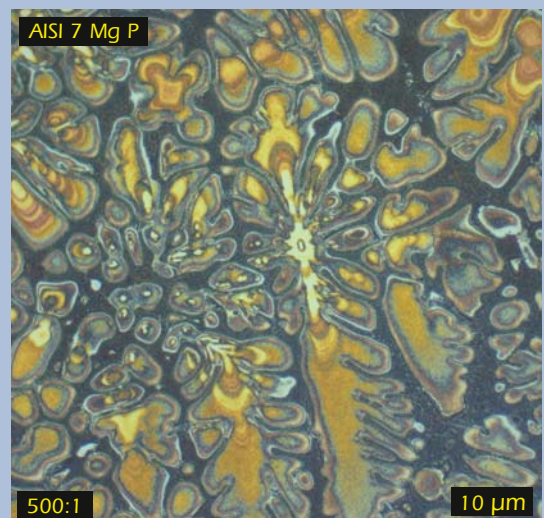
We are looking forward to inform you about availability, delivery time and price. And send you an individual offer.

	Grinding	Polishing I	Polishing II	Final polish.
Base	GeccoFix	PT Super Plan perf.	PT Seda	PT Chem
G/P medium	SiC-Papier	DiaTwin Max mono	DiaTwin Max mono	fumed Silica-suspension
Grain size	600	9 µm	3 µm	200 nm
Lubricant	Water	—	—	—
Rotation	300	150	150	150
Pressure	25 N	25 N	25 N	15 N
Time	until flat	3 Minutes	3 Minutes	1 - 2 Minutes

Preparation protocol

Optional: structure evaluation (to be charged)

"The macro picture shows undesirable inhomogeneities that occurred during die casting. The all-mixed crystals are colored, segregation zones remain bright.



Structure, macro picture

The silicon phase in the Al/Si eutectic turns dark, the AlSiFe phase retains its light gray color. Pores and voids appear black. Etching was carried out here using a color etching according to Weck."



Your strong partner for everything related to materialography and sample preparation

Good to know

Good answers even to unusual questions about materialography. Innovative technologies. Flexibility in every way. That is Cloeren Technology.

We grow with our knowledge, our products and innovations. And want to help our customers. With a dedicated team and a lot of fun at work.

We wish you good preparation at all times.

Yours Heinz-Hubert Cloeren

Beginners & experts welcome

The following applies in particular to materialographic sample preparations: What counts more than individually tailored advice?

We are happy to deal with your specific questions individually. No matter which department you come from or how developed your previous knowledge is.

Benefit from our expertise in materials technology.

Free concepts for your preparation

Send us your samples and a note about the task. We develop a free preparation concept for you (without evaluating the microstructure or other material properties).

Smart product range

The Cloeren product range with constant product quality stands for perfect processes in materialographic sample preparation. Even demanding users will find the right product here:

- Properly applied, all products allow an artifact-free materialographic examination.
- The products correspond to the latest state of technology and are continuously adapted to new industrial developments.
- The product range covers the need for a variety of materialographic sample preparation.

Cloeren training courses: the be-all and end-all

Increase your skills with materialography know-how from experts. Training courses from Cloeren Technology are your guarantee for methodical progress in materialography.

Before you set up your laboratory

Take advantage of our decades of experience working in materialographic laboratories. You will receive neutral recommendations and tips that will pay off for you.

Curious about specialties

Do you have requirements that do not meet the materialographic standards? We are particularly interested in such cases. We look forward to helping you. Special solutions - and with a good price-performance ratio - are among our specialties. Please contact us.



In-house application laboratory

Heinz-Hubert Cloeren



Cloeren Technology
good to know

In-house application laboratory

The heart of our company, our application laboratory, has important functions:

- Development of preparation concepts for the samples you send in.
- Quality assurance of our consumables, purchased consumables and devices for the materialographic sample preparation.
- Implementation of material technology training.

For this purpose, the laboratory is equipped with all the necessary materialographic preparation systems.

Qualified employees use cutting machines, Warm embedding presses, Vacuum infiltration devices, Grinding and polishing machines as well as devices for thin grinding technology and mobile component testing.

We use hardness testing systems and digital image processing systems to check technical parameters.

We use various microscopes to display structural structures in reflected or transmitted light.

Full selection in the web shop

Browse through our innovative product selection.

You will find products for example from the areas of Cutting, Embedding, Grinding, polishing, etching and accessories.

We are looking forward to your visit.

Heinz-Hubert Cloeren:

"You have to keep up with the times."

At the age of 8 he dreamt of a geologist's hammer.

As a speaker, guest speaker, material historian and author, the name Heinz-Hubert Cloeren has become a well known name in the field of materialography.

His constant curiosity about methods for exploring materials and his knowledge, coupled with his many ideas, resulted in the founding of his own company in 2004. With success: In the following four business years, the business premises were expanded twice, accompanied by the first developments and productions of materialographic product innovations.

His standard work "Materialographic Preparation Techniques" now helps many users with their targeted work. Today, Cloeren Technology employs 22 people at its Wegberg location. 10 agencies worldwide sell the Cloeren Technology product range.

Inventiveness for delightful products

Knowledge makes one creative and creates new products. In this way, Cloeren Technology has already been able to close many gaps in materialographic sample preparation in a profitable and environmentally conscious manner - also benefiting from many research and development projects together with universities.

Innovative products such as light curing boxes, embedding moulds for the UltraLight, warm embedding agent that does not stick to the tool or polishing cloths on ferro foil now allow users new ways of sample preparation.

Family friendly growth

New development also means creating new jobs. At Cloeren Technology, the development of new products and technologies is always accompanied by an appropriate specialist and auxiliary staff who enjoy the latest workplace guidelines.

The focus is on a family-friendly and life-work-balance oriented personnel policy. Every employee is encouraged and challenged in such a way that his family situation is not burdened or ignored.

Cloeren Team



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The micrographs above and below show several copper oxides, recognizable by the color gradations green, yellow and red.

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They come from a cross section of the corroded surface of a 3000 year old bronze bowl from Gordion, Turkey.

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1

New aids for efficient sample preparations

Cloeren Technology has again developed new, practical products for you. So that your preparations are easier to handle.

1 CT UltraViLiBo M

Cold embedding of individual samples in just 60 seconds. Easy to use and ideal for small needs. See page 11.

2 Embedding moulds made of LDPE

The bottom of an embedding mould often has to be removed after each embedding. As a result, it will no longer sit correctly after some time. With our new embedding moulds made of LDPE, you can always attach the floor to the cylinder with a click. Depending on which cold embedding material you use, the sample will fall out on its own if you turn the embedding mould. Suitable for most cold embedding materials. See page 24.

3 Embedding aids made of metal

The stainless steel embedding aids now also enable the fixing of very small and thin-walled embedding samples. See page 25.

4 Embedding moulds made of glass

Our new glass embedding moulds secure easy demoulding of already embedded samples. Consisting of a glass cylinder and a silicone base, the edge of the sample remains highly transparent and dry during UV curing. It suits perfectly for embedding with the CT UltraViLiBo systems. Registered design protection. See page 24.

5 Etching tongs with etching bowl

Enjoy more laboratory safety with our new etching tongs. Thanks to its geometry, it allows the etching of samples even in small containers, such as an etching bowl. The sample does not fall out of the tongs when securely fixed. See page 57.



2



3



For you and our environment

In future, hardener liquids and epoxy resins will be available in tin cans instead of glass bottles with a polystyrene box.

Tinplate benefits for everyone:

- Less environmental impact: Styrofoam is eliminated
- 100% leakproof closures
- Easier handling when dosing



4



5

Learn directly from the expert: Cloeren training. The basis of a good work.

Training courses from Cloeren Technology are your guarantee for methodical progress in materialography.

You will be taught exclusively by experienced materialography experts. Practitioners who know what they're talking about.

With many good suggestions and answers to your questions, you will feel more security and trust in your work in the future.

The methodical structure of our training courses has proven itself for many years.

Training in your company

- No staff failure
- No travel expenses for employees
- Training on your own equipment with your samples
- Flat-rate training costs
- Direct advice and problem solving on site

Your knowledge? Your practice?

No matter whether you are an expert or a beginner. We adapt to you. So that you take the best with you.

Also there for you after the training

Talk to us if you have any questions. We're here to help.



Cloeren Technology
good to know

Theory and practice sensibly build on one another.

We don't neglect the joy of learning either:

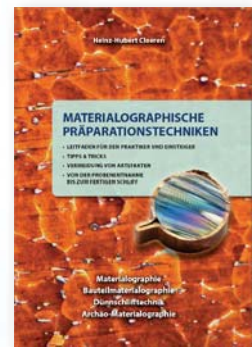
Our training courses are far from a dry transfer of knowledge.

Increase your skills with know-how from experts. Make yourself indispensable by continuing to improve your professional development.

When can we welcome you to one of our training courses?

Training in our laboratory

- skilled specialists
- Good concentration, as it is far from everyday work
- Inspirations from previously unknown techniques or options



In focus: your samples

We discuss our extensive evaluation and documentation of your samples.

Smart companion included

In addition to training documents and a certificate, you will also receive the book "Materialographische Präparationstechniken" (german language only, english follows)



Request now for free:
Materialography trainings (german language)

Cloeren has the entire knowledge of materialography.

Materialographic sample preparation: From the material sample to the finished cut

1-day basic course in 2 variants: a) non-metallic materials and b) metallic materials.

Course content: Sampling: sawing, cutting etc. Specimen fixation, hot and cold embedding, grinding and polishing, visualization of the microstructure by etching, microscopy and interpretation.

Materialography: Structural representation and interpretation

1 - 2-day advanced seminar for advanced students

Course content: What is the term structure? How does a structure arise? The structure and its interpretation, imparting of material-specific knowledge, visualization of the microstructure through etching and microscopy.

Further training:

- Product training & materialography
- Thin-section techniques
- Mobile component materialography

Wished learning content

Do you want to learn anything specific? Talk to us about it. We are happy to prepare for you and your topics.

CT UltraViLiBo

CT UltraViLiBo M



Step 1

Fill in the embedding moulds with CEM UltraLight



Step 2

Place the filled embedding moulds in the exposure drawer. Expose for about 60 seconds.



Step 3

After the embedding process you can take the samples and carry out further materialographic preparation steps.

CT UltraViLiBo

18 cold embeddings within 60 seconds

The CT UltraViLiBo with the latest LED technology and an appropriate wavelength (360 - 405nm) enables the embedded materialographic samples to be ready within 60 seconds.

Depending on the size of the embedding mould, the CT UltraViLiBo holds up to 18 embedding moulds.

A lot of good things on board

- easy-care due to solid, powder-coated aluminum housing
- gentle, low-noise closing of the drawer thanks to soft-close technique
- Up to 18 embeddings simultaneously (depending on construction size)
- suitable for transparent embedding moulds: from 25 mm up to 60 mm (max. 30 mm specimen height)
- UV-LED-Lifetime: up to 2,8 Million embeddings, wavelength 360-405 nm
- temperature of polymerization is appx. 90°C (70 °C), if initial temperature is ca. 22°C (14°C)
- hardness after curing process is about from 84 to 86 Shore D

- low shrinkage
- further increase in hardness and minimization of shrinkage possible by adding our filler materials UV-PUL002 or UV-PUL003
- Dimensions: 48 x 36 x 32.5 cm (length x width x height)

Device

CT-UVBox001 price on request

Version 3.3 with soft-close technology

Accessories and spare parts

CT-UVBox-Komp01: Tube LED-UVA Universal € 11,30

CT-UVBox-Komp02: Floatglass 3mm, 250mm x 150mm € 10,60

CT-UVBox-Komp03: power cord, black, 2m € 7,50

CT-UVBox-Komp89: safety glasses, UV-400 / blue light protection € 18,00

Services

On request we will install the device for you and instruct you accordingly. We optionally offer an exchange guarantee, even within 24 hours. Please contact us if you are interested.

The UltraViLiBo's: Cold embedding with intelligence

efficient

You save working time energy
and material.

sustainable

Less waste by saving
on consumables.

innovative

No smell.
Less power consumption thanks
to UV LED technology.

high-quality

Made in Germany: in cooperation
with regional companies.



The "little" Brother with only
13 cm diameter and
15 cm in height.



Also available as a set in a case. Inside: CT
UltraViLiBo M with consumables.

CT UltraViLiBo M

Fit for small needs

As a further development of its „big brother“, we have designed
the CT UltraViLiBo M so that it can also be used in small
laboratories.

Easy to use and ideal for embedding of individual samples or with
little testing effort.

A valuable addition to the daily materialographic sample
preparation.

Consumables

CT UltraViLiBo and CT UltraViLiBo M

1 CT-UV002: CEM Ultra Light, 1 liter, UV light-curing single-
component embedding agent of highest transparency € 89,50

2 UV-PUL002: UV filler made of finely granulated thermo
plastic, 1 kg, to improve the edge adhesion and the
increase in hardness (normal processing also possible
without a trigger system) € 43,30

3 UV-PUL003: UV filler made of glass plates, 1 kg, to
improve the edge adhesion and the increase in hardness € 37,00

4 Clean013: CT UltralightClean, 1 liter, for cleaning the
surface of the embedded samples with CEM Ultra Light € 12,10



Cloeren Technology
good to know

Compact design

- High level of security for the user
- Inductive energy transfer
- Easy-care, robust, blue anodized aluminum housing
- Protection of utility models DE 20 2019 103 168 U1 2019.07.25



1



2



3



4

Cut-off wheels

Cut-off wheels - 1 piece / 5 pieces

application	hardness range [HV]	type	properties
ferrous materials	150 - 700	corundum cut-off wheel unreinforced	very good cutting performance
		corundum cut-off wheel fabric reinforced	optimised formula, less susceptible to break
	500 - 1000	High Quality Premium corundum cut-off wheel unreinforced	very good cutting performance, longer service life
		corundum cut-off wheel unreinforced	very good cutting performance
		corundum cut-off wheel fabric reinforced	optimised formula
-	High Quality Premium corundum cut-off wheel unreinforced	very good cutting performance, longer service life	
-	High Quality Premium corundum precision cut-off wheel unreinforced	precise cuts	
surface tempered steel	core hardness < 450	corundum cut-off wheel fabric reinforced	optimised formula, less susceptible to break
	core hardness > 450		
titanium, non-ferrous metals, plastics	-	Silicon carbide cut-off wheel unreinforced	very good cutting performance
		High Quality Premium Silicon carbide cut-off wheel unreinforced	very good cutting performance, precise cuts
most of technical raw materials	-	Universal-corundum cut-off wheel unreinforced	very good cutting performance
		Universal-corundum cut-off wheel unreinforced *extra thin*	

information: all other dimensions or specifications request; delivery period if out of stock approx. 8 - 12 weeks.

item no.	Ø [mm]	hole [mm]	thickness [mm]	packaging unit	price EUR
Cut029	254	32	1,8	1 piece	11,60 ¹
Cut030	305	32	1,8	1 piece	14,90 ¹
Cut024	350	32	2,5	1 piece	20,30 ¹
Cut023	254	32	1,7	1 piece	11,60 ¹
Cut037	305	32	2,2	1 piece	14,90 ¹
Cut038	350	32	3,0	1 piece	20,30 ¹
Cut039	406	32	3,2	1 piece	27,20 ¹
Cut049	250	32	1,5	1 piece	13,80 ¹
Cut050	300	32	1,8	1 piece	18,00 ¹
Cut051	350	32	2,5	1 piece	23,60 ¹
Cut052	400	32	3,0	1 piece	on request
Cut033	254	32	1,5	1 piece	11,60 ¹
Cut034	305	32	1,8	1 piece	14,90 ¹
Cut025	350	32	2,5	1 piece	20,30 ¹
Cut036	406	32	3,2	1 piece	27,20 ¹
Cut061	508	32	3,5	1 piece	51,40 ¹
Cut053	250	32	1,5	1 piece	13,80 ¹
Cut054	300	32	2,0	1 piece	17,90 ¹
Cut055	350	32	2,5	1 piece	23,60 ¹
Cut056	400	32	3,0	1 piece	34,50 ¹
PCut009	150	12,7	0,5	5 pieces	69,00 ²
PCut010	200	12,7	0,8	5 pieces	101,00 ²
PCut013	200	22	0,8	5 pieces	101,00 ²
Cut058	250	32	1,7	1 piece	13,80 ¹
Cut062	300	32	2,0	1 piece	17,90 ¹
Cut063	350	32	2,3	1 piece	23,60 ¹
Cut064	250	32	1,7	1 piece	13,80 ¹
Cut065	300	32	2,0	1 piece	17,90 ¹
Cut066	350	32	2,3	1 piece	23,60 ¹
Cut057	250	32	1,7	1 piece	16,50 ¹
Cut059	300	32	2,0	1 piece	21,80 ¹
Cut042	350	32	2,5	1 piece	27,50 ¹
Cut043	400	32	3,0	1 piece	on request
PCut011	150	12,7	0,5	5 pieces	69,00 ²
PCut012	200	12,7	0,8	5 pieces	101,00 ²
PCut014	200	22	0,8	5 pieces	101,00 ²
Cut067	250	32	1,5	5 pieces	76,00 ²
Cut068	250	32	0,8	5 pieces	87,50 ²

1 quantity discount per item: for orders from 25 pieces 5%, from 50 pieces 10%, from 100 pieces 15%

2 quantity discount per item: for orders from 3 PU 5%

Cut-off wheels

Diamond- and CBN-cut-off wheels - 1 piece

binding	application	item no.	Ø [mm]	hole [mm]	thickness [mm]	price €
metal bound (hard materials, except carbonaceous materials)	ceramics and minerals	DiaCut001	75	12,7	0,18	196,00
		DiaCut003	100	12,7	0,35	228,00
		DiaCut005	125	12,7	0,35	264,00
		DiaCut006	125	12,7	0,40	264,00
		DiaCut008	150	12,7	0,45	295,50
		DiaCut026	150	12,7	0,60	411,00
		DiaCut011	200	22,0	0,60	352,00
	hard metals, concrete and minerals	DiaCut002	75	12,7	0,20	196,00
		DiaCut004	100	12,7	0,30	228,00
		DiaCut007	125	12,7	0,50	277,00
		DiaCut009	150	12,7	0,40	295,50
		DiaCut010	150	12,7	0,75	333,00
		DiaCut012	200	22,0	0,60	352,00
		DiaCut028	200	12,7	1,50	397,50
		DiaCut013	250	32,0	1,50	491,00
		DiaCut015	300	32,0	2,00	553,50
		DiaCut017	350	32,0	1,60	733,50
	hard and ductile steels	DiaCut019	400	32,0	2,00	983,50
		DiaCut021	450	32,0	2,50	1.253,50
		CBNCut001	125	12,7	0,60	369,00
	Bakelite bound (high carbon materials)	ceramic, hard metals, hard minerals, glass and spray coating	CBNCut002	150	12,7	0,80
CBNCut003			250	32,0	1,20	467,00
DiaCut027			125	12,7	0,60	295,50
DiaCut025			150	12,7	1,00	411,00
DiaCut014			250	32,0	1,60	491,00
DiaCut016			300	32,0	1,80	627,50
hard and ductile steels		DiaCut018	350	32,0	1,80	794,00
		DiaCut020	400	32,0	1,80	1.119,50
		CBNCut009	200	12,7	0,70	436,00
		CBNCut004	300	32,0	1,80	795,00
nickel bound	embedded specimen in plastic	CBNCut005	350	32,0	1,80	921,50
		CBNCut006	400	32,0	2,00	on request
		CBNCut007	450	32,0	2,10	on request
		DiaCut023	125	12,7	1,50	393,00
		DiaCut022	150	12,7	1,50	461,00
		DiaCut024	200	12,7	1,80	596,00

In general: If you are unsure about the choice of the diamond cut-off wheels, please tell us the application, so that we can offer for you the more suitable diamond cut-off wheel.

information: all other dimensions or specifications request; delivery period if out of stock approx. 4 – 6 weeks.

Special heat- and corrosion protection agent for all types of cutting machines!
offers high technical capacity and best possible industrial safety

CUTLUB is a water-soluble, mineral oil-free cutting fluid of the amine-and boric acid-free generation.



This special product for the separation of hard metal materials, steel-and cast qualities, colored metals and non-ferrous materials prevents the absorption of cobalt ions in grinding and/or decollating solutions and with that also their discoloration

properties

- transparent solution
- high stability
- foam-inhibited
- effective corrosion protection
- good cooling capability and flushing effect
- long durability of grinding and/or decollating solutions
- water hazard classification 1



CUTClean – to be used when using CUTLUB before the coolant-change as a system-cleaner or during the cutting-process as a fungicide. It is added during the cutting fluid change depending on the degree of contamination of 0.5 to 1.5%.

properties

- excellent flushing effect
- bactericidal and fungicidal effect
- good corrosion protection
- easy application
- improved occupational hygiene
- cleaning even in inaccessible places

Corrosion protection coolant mineral oil-free CUTLUB

	bundle	price €
CUTLUB001	1,0 kg	25,90
CUTLUB002	5,0 kg	114,20
CUTLUB003	10,0 kg (2 x 5,0 kg)	219,50

System-cleaner / fungicide CUTClean

	bundle	price €
CUTCI001	1,0 kg	24,00

Defoamer

	bundle	price €
ES002	500 g	21,90
ES001	1,0 kg	38,30

Warm embedding materials

Embedding

	WEM EPOXY	WEM UNI	WEM WiDa	WEM Klar	WEM FAST Orange
product	epoxy resin basis with mineral filling materials	melamine resin filled with glass fiber materials	epoxy resin basis with mineral filling and glass fiber materials	thermoplastic	thermoset with inorganic and organic filling materials
components	granulated powder	granulated powder	granulated powder	extreme fine granulated powder	plastic granulate
properties	thin, extreme hardness, optimal edge connection, good adhesion to the specimen surface, very good grinding and polishing properties	thin, high hardness, optimal edge connection, good adhesion to the specimen surface, very good grinding and polishing properties, suitable for black surface specimen	thin, extreme hardness, optimal edge connection, good adhesion to the specimen surface, very good grinding and polishing properties, does not stick on embedding instruments, non-adherent	very thin, melts rapidly	hard, low price, good contrast, chemical resistant
application	all hard materials like e.g. hardened gears, hard metals and ceramics	all hard materials like e.g. hardened gears, hard metals and ceramics, steel in general, aluminum, copper materials	all hard materials like e.g. hardened gears, hard metals and ceramics	complete embedding solution for thin layers, top layer for specimen labeling	complete embedding solution, filling material for cost reduction
heat time ¹	5 - 7 minutes	4 - 7 minutes	5 - 7 minutes	4 - 7 minutes	5 - 7 minutes
heat temperature ¹	150 - 180 °C	150 - 180 °C	150 - 180 °C	150 - 180 °C	180 - 190 °C
cooling time ¹	2 - 4 minutes	7 - 10 minutes	2 - 4 minutes	7 - 10 minutes	2 - 4 minutes
strength	90 - 93 Shore D	85 - 87 Shore D	90 - 93 Shore D	85 - 87 Shore D	90 - 92 Shore D
color	black	ivory	black-mottled	crystal clear	orange

WEM EPOXY



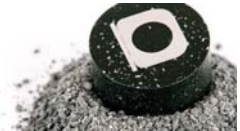
	bundle	price €
WEM001	1,0 kg	36,00
WEM002	7,5 kg	240,00
WEM021	22,5 kg (3 x 7,5 kg)	595,00

WEM UNI



	bundle	price €
WEM008	1,0 kg	36,70
WEM009	7,5 kg	245,00
WEM023	22,5 kg (3 x 7,5 kg)	607,00

WEM WiDa



	bundle	price €
WEM044	1,0 kg	37,70
WEM045	7,5 kg	252,00
WEM046	22,5 kg (3 x 7,5 kg)	625,50

WEM Klar



	bundle	price €
WEM012	1,0 kg	43,00
WEM013	7,5 kg	283,50
WEM014	22,5 kg (3 x 7,5 kg)	704,00

WEM FAST Orange



	bundle	price €
WEM036	1,0 kg	23,00
WEM037	7,5 kg	155,50
WEM038	22,5 kg (3 x 7,5 kg)	419,50

¹ based on a specimen diameter about Ø 40 mm

WEM FAST Blue	WEM REM	WEM Phenol	WEM BIO Plus	WEM BIO Fill
thermoset with inorganic and organic filling materials	phenolic resin with graphite	phenolic resin	natural-fiber reinforced PLA based compound (poly lactic acid)	natural-fiber reinforced PP based compound (polypropylene)
plastic granulate	fine granulated powder	fine granulated powder	pellets (absolute dust-free)	pellets (absolute dust-free)
hard, low price, good contrast, chemical resistant	conductive	low price	non-toxic, compostable, melts rapidly, high mechanical strength, resistant against acids and solvents	low price, high melt index, good flowability and low processing temperature, resistant against acids and solvents
complete embedding solution, filling material for cost reduction	REM analysis possible without spattering	filling material for cost reduction	complete embedding solution	possible for larger specimen > Ø 40 mm, filling material for cost reduction
5 - 7 minutes	5 - 7 minutes	5 - 7 minutes	4 - 5 minutes	5 - 7 minutes
180 - 190 °C	150 - 180 °C	150 - 180 °C	120 - 170 °C	170 - 190 °C
2 - 4 minutes	2 - 4 minutes	2 - 4 minutes	3 - 5 minutes	3 - 5 minutes
90 - 92 Shore D	65 - 70 Shore D	80 Shore D	75 - 80 Shore D	73 - 78 Shore D
blue	black	black	wood colors	wood colors

WEM FAST Blue



	bundle	price €
WEM040	1,0 kg	23,00
WEM041	7,5 kg	155,50
WEM042	22,5 kg (3 x 7,5 kg)	419,50

WEM REM



	bundle	price €
WEM010	1,0 kg	44,00
WEM011	7,5 kg	313,00
WEM024	22,5 kg (3 x 7,5 kg)	818,00

WEM Phenol



	bundle	price €
WEM005	2,5 kg	26,70
WEM006	7,5 kg	59,50
WEM019	22,5 kg (3 x 7,5 kg)	161,50
WEM020	37,5 kg (5 x 7,5 kg)	256,50

WEM BIO Plus



	bundle	price €
WEM025	2,5 kg	30,00
WEM026	7,5 kg	73,00
WEM027	22,5 kg (3 x 7,5 kg)	186,00
WEM028	37,5 kg (5 x 7,5 kg)	279,50

WEM BIO Fill



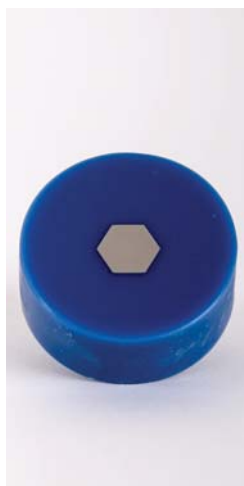
	bundle	price €
WEM029	2,5 kg	23,40
WEM030	7,5 kg	56,50
WEM031	22,5 kg (3 x 7,5 kg)	146,50
WEM032	37,5 kg (5 x 7,5 kg)	220,00

Cold embedding materials

Embedding

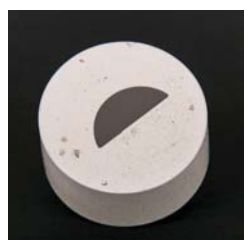
product	CEM1000 Blue	CEM2000 TRIFIX	CEM3000 TWINFIX
	with methyl methacrylate	without methyl methacrylate	polyester
properties	universal cold embedding material	no dangerous goods, less air bubble entrapment, neutral smell	low shrinkage and optimal edge connection
components	1 powder 1 liquid	1 powder 1 liquid	1 powder 1 liquid
mixture ratio (volumetric)	2 : 1 powder: 2 parts ² liquid: 1 part ²	2 : 0,8 powder: 2 parts ² liquid: 0,8 parts ²	3 : 2 : 1 powder: 3 parts ² syrop I: 2 parts ² syrop II: 1 part ²
mixture ratio (gravimetric)	2 : 1 powder: 2 parts liquid: 1 part	2 : 0,9 powder: 2 parts liquid: 0,9 parts	2,5 : 2 : 1 powder: 2,5 parts syrop I: 2 parts syrop II: 1 part
pot life	3 - 5 minutes	3 - 5 minutes	5 minutes
cure time	10 - 12 minutes	7 - 8 minutes	8 - 10 minutes
cure temperature ¹	92 - 98 °C	92 - 98 °C	110 °C
processing-temperature	room temperature 18 - 25°C	room temperature 18 - 25°C	room temperature 18 - 25°C
strength ¹	81 - 83 Shore D	81 - 83 Shore D	85 - 87 Shore D
color	blue	blue	whitish opaque
useable with EpoFluor	●	●	●
useable with EpoCloer	●	●	●

CEM1000 Blue



		bundle	price €
CEM002	powder	1,0 kg	53,00
CEM034	powder	5,0 kg	245,00
CEM051	powder	10,0 kg	451,00
CEM003	hardener liquid	500 ml	24,80 ³
CEM055	hardener liquid	without methyl methacrylate 500 ml	34,00 ³
CEM001	set	1,0 kg powder 500 ml hardening liquid 25 mixing cups & 50 wooden spatulas	80,50
CEM056	set	without methyl methacrylate 1,0 kg powder 500 ml hardening liquid 25 mixing cups & 50 wooden spatulas	88,50
CEM033	bulk pack	3,0 kg powder 1,5 l hardener liquid (3x 500ml)	215,50
CEM057	bulk pack	without methyl methacrylate 3,0 kg powder 1,5 l hardening liquid (3x 500ml)	237,50

CEM2000 TRIFIX



		bundle	price €
CEM042	powder	1,5 kg	80,00
CEM043	hardening liquid syrup I	1,0 l	63,00
CEM044	hardening liquid syrup II	500 ml	37,00
CEM021	set	1,5 kg powder 1,0 l syrup I 500 ml syrup II 25 mixing cups & 50 wooden spatulas	167,50

¹ based on a specimen diameter about Ø 40 mm

² using measuring spoon 17 ml

CEM3020	CEM3070	CEM4000 Lightfix	CEM9000
methyl methacrylate	methyl methacrylate	without methyl methacrylate	polyurethane
new eco-friendly hardening system	electro conductive	blue-light-curing (wavelength 400-500 nm)	very thin, particularly suitable for bulk embedding
1 powder 1 liquid	1 powder 1 liquid	1 liquid	2 liquids
2 : 1 powder: 2 parts ² liquid: 1 part ²	2 : 1 powder: 2 parts ² liquid: 1 part ²	-	1 : 1
5 : 3 powder: 5 parts liquid: 3 parts	5 : 3 powder: 5 parts liquid: 3 parts	-	1 : 1
3 - 4 minutes	3 - 4 minutes	o. A.	3 - 5 minutes
20 - 25 minutes	15 - 20 minutes	10 - 12 minutes	12 - 14 minutes
100 - 110 °C	85 - 89 °C	o. A.	80 °C
room temperature 18 - 25°C	room temperature 18 - 25°C	room temperature 18 - 25°C	mandatory room temperature 18 - 25°C
85 - 87 Shore D	65 - 70 Shore D	80 Shore D	70 - 75 Shore D
crystal clear (cured with pressure pot)	black	crystal clear	white - light yellow
●	●	●	●
●	●	●	●

CEM3000 TWINFIX



		bundle	price €
CEM059	powder	750 g	47,00
CEM061	powder	1,5 kg	87,00
CEM062	powder	5,0 kg	243,00
CEM063	powder	10,0 kg	397,00
CEM060	hardening liquid	500 ml	38,00 ³
CEM058	set	750 g powder 500 ml hardening liquid 25 mixing cups & 50 wooden spatulas	87,00

CEM3020 (for crystal clear curing please use pressure pot, on page 55)



		bundle	price €
CEM030	powder	1,0 kg	56,50
CEM039	powder	5,0 kg	222,00
CEM036	powder	10,0 kg	386,00
CEM031	hardening liquid	500 ml	26,80 ³
CEM040	hardening liquid	1,0 l	52,50 ⁴
CEM029	set	1,0 kg powder 500 ml hardening liquid 25 mixing cups & 50 wooden spatulas	85,00

CEM3070



		bundle	price €
CEM049	powder	1,0 kg	117,50
CEM050	hardening liquid	500 ml	49,00 ³
CEM048	set	1,0 kg powder 500 ml hardening liquid 25 mixing cups & 50 wooden spatulas	168,00

³ quantity discount per item: for orders from 5 pieces 5%, from 10 pieces 10%

⁴ quantity discount per item: for orders from 3 pieces 5%, from 5 pieces 10%

Cold embedding material

CEM4000 Lightfix

without methyl methacrylate



CEM064	one-component-embedding material	bundle 1,0 l	price € 93,00
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CEM9000



CEM013	two-component-embedding material	bundle 1,0 kg component A 1,0 kg component B	price € 43,80
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Paraffin for vacuum infiltration

Application:

With this method, pores, fissures, cracks and similar openings are sealed so any moisture remains trapped after preparation (e.g. after cleaning or after etching) and does not pollute the environment.

For this purpose, paraffin (such as paraffin) can be melted in a laboratory vessel with the addition of fluorescent dyes (on page 22); these make the pores and gaps visible afterwards. When immersed in the paraffin, the sample should be warmed slightly.

For very fine porous material a short vacuum infiltration has proven favorable. Here, the laboratory vessel is placed in a pressure pot (on page 55) with the paraffin and the sample. You allow the paraffin flow in the pores and cracks, under pressure.



white paraffin based wax bath

After sufficient paraffin is pulled into the surface, the remainder of the prepared ground surface is to be wiped with a clean soft cloth. Alternatively, it is to be lifted off the surface, after it has hardened. The sample can be final polished with oxide polishing suspensions easily. In this case, the paraffin won't be removed.



The moisture leakage from the middle of the sample can be seen very clearly. Optimal structure evaluation and documentation are impossible.



After wax impregnation, all problems are eliminated.

CTWax - 1 kg



Wax001	CTWax N	melting temperature 61 °C	price € 16,00
Wax002	CTWax Plus	56 °C	30,50
Wax003	CTWax XPlus	50 - 54 °C	32,50

product	Epoxy 1000	Epoxy 2000	EPO-RESIN	Epoxy 3000 Quick	EpoCloer 3000 Plus
	epoxy resin	epoxy resin	epoxy resin	epoxy resin	colored epoxy resin
components	1 resin 1 liquid	1 resin 1 liquid	1 resin 1 liquid	1 resin 1 liquid	1 resin 1 liquid
mixture ratio	5 : 1 resin: 100 g liquid: 20 g	50 : 24 resin: 100 g liquid: 48 g	100 : 13 resin: 100 g liquid: 13 g	2 : 1 resin: 100 g liquid: 50 g	5 : 1 resin: 100 g liquid: 20 g
pot life	20 minutes	45 minutes	20 minutes	100 minutes	20 minutes
cure time	6 - 8 hours	14 - 16 hours	8 - 12 hours	30 minutes	6 - 8 hours
cure temperature ¹	25 °C	25 °C	25 °C	bei 80 °C im Ofen	25 °C
processing-temperature	mandatory room temperature 18 - 25°C	room temperature 18 - 25°C	room temperature 18 - 25°C	room temperature 18 - 25°C	room temperature 18 - 25°C
strength ¹	70 - 80 Shore D	75 - 85 Shore D	o. A.	70 - 80 Shore D	70 - 80 Shore D
color	crystal clear	yellowish - crystal clear	almost crystal clear	yellowish - transparent	reflect pink
useable with EpoFluor	●	●	●	●	-
useable with EpoCloer	●	●	●	●	-

Epoxy 1000



		bundle	price €
Epoxy002	resin	1,0 kg	39,50
Epoxy004	resin	5,0 kg	179,00
Epoxy003	hardening liquid	200 g	22,10
Epoxy005	hardening liquid	1,0 kg	96,00
Epoxy001	set	1,0 kg powder 200 g hardening liquid 25 mixing cups & 50 wooden spatulas	65,00

Epoxy 2000



		bundle	price €
Epoxy007	resin	1,0 kg	49,50
Epoxy009	resin	5,0 kg	230,50
Epoxy008	hardening liquid	480 g	48,50
Epoxy010	hardening liquid	2,4 kg	223,50
Epoxy006	set	1,0 kg powder 480 g hardening liquid 25 mixing cups & 50 wooden spatulas	99,50

EPO-RESIN



		bundle	price €
Epoxy018	resin	1,0 kg	54,00
Epoxy020	resin	5,0 kg	255,00
Epoxy019	hardening liquid	250 g	35,00

Epoxy 3000 Quick



		bundle	price €
Epoxy015	set (cans)	667 g resin 333 g hardening liquid 25 mixing cups & 50 wooden spatulas	74,50
Epoxy031	resin (glass bottles)	1,0 kg	74,50
Epoxy032	hardening liquid (glass bottles)	500 g	38,00
Epoxy030	set (glass bottles)	1 kg resin 500 g hardening liquid 25 mixing cups & 50 wooden spatulas	114,50

¹ based on a specimen diameter about Ø 40 mm

EpoCloer 3000 Plus

Our ready-to-use dyed epoxy resin EpoCloer 3000 Plus is characterized by optimal edge connection and low shrinkage, and also solvent-free.

Perfectly suitable for visualization of embedding material in macro- and microscopy bright field, dark field, polarization and fluorescence.

Embedding



		bundle	price €
Epocloer012	resin	1,0 kg	47,50
Epocloer013	hardening liquid	200 g	22,10
Epocloer011	set	1,0 kg resin 200 g hardening liquid 25 mixing cups & 50 wooden spatulas	72,00

pigment powder EpoCloer 4000 and EpoFluor - 50g

Our fluorescent color-pigment powders for permanent dyeing of epoxy resins, either in pink, yellow or blue. Same as for pigment pastes they offer viewing of cracks and pores.

The addition takes place as the resin component with an advised dosage of approx. 1 g - 2 g in approx. 100 g resin.

It should be noted that the particle size of fluoroplastic pigment powders EpoFluor is less than 1 μm and can thus penetrate the smallest cracks in the material sample, whereas the particle size of the reflective EpoCloer 4000 is larger (1 - 25 μm) and more suitable for coarser cracks.



		price €
Epocloer006	EpoCloer 4000 (pink)	25,20
EpoFluor001	EpoFluor Yellow	25,20
EpoFluor002	EpoFluor Blue Product on sale while stocks last	25,20

pigment paste EpoCloer - 50g

EpoCloer is our pigment paste for permanent dyeing of epoxy resins.

The pastes offer high pigment contents in 5 different colors, are readily admixed, luminous and free of softeners, cadmium and lead. Optimal reproduction of color pigments during dark field viewing shows cracks and pores.

EpoCloer pigment pastes contain an epoxy resin as binding agent; therefore the addition takes place the resin component with an advised mixing ration of 1 - 10 %.



		price €
Epocloer001	EpoCloer Red	11,30
Epocloer002	EpoCloer Blue	11,30
Epocloer003	EpoCloer Yellow	11,30
Epocloer004	EpoCloer Green	11,30
Epocloer005	EpoCloer Black	11,30

Correctly used every embedding mould is metrichas a long service life

Silicone rubber - blue, 1 piece

- suitable for vacuum infiltration and for embedding under pressure
- excellent dimensional accuracy
- Clean working
- various diameters



	specimen height	dimensions	price €
KEF004	25 mm	Ø 25 mm	10,10 ¹
KEF005	25 mm	Ø 30 mm	10,60 ¹
KEF006	30 mm	Ø 40 mm	11,90 ¹
KEF007	30 mm	Ø 50 mm	18,00 ¹
KEF057	30 mm	Ø 60 mm	20,30 ¹
KEF008	35 mm	Ø 60 mm	20,80 ¹
KEF051	35 mm	Ø 70 mm	26,10 ¹
KEF052	35 mm	Ø 80 mm	34,00 ¹
KEF053	35 mm	Ø 100 mm	43,30 ¹
KEF009	25 mm	55 x 30 mm	18,00 ¹
KEF010	25 mm	70 x 40 mm	21,90 ¹
KEF011	25 mm	100 x 50 mm	37,60 ¹

Silicone rubber - transparent, 1 piece

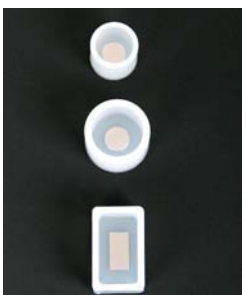
- suitable for light-curing embedding materials
- high resistance to casting resins, especial epoxy resins



	specimen height	Abmessungen	price €
KEF037	25 mm	Ø 25 mm	11,10 ¹
KEF029	25 mm	Ø 30 mm	11,60 ¹
KEF058	25 mm	Ø 32 mm	11,90 ¹
KEF050	25 mm	Ø 40 mm	13,10 ¹
KEF024	30 mm	Ø 40 mm	13,10 ¹
KEF038	30 mm	Ø 50 mm	19,80 ¹
KEF074	30 mm	Ø 60 mm	23,00 ¹
KEF039	35 mm	Ø 60 mm	23,00 ¹
KEF054	35 mm	Ø 70 mm	29,00 ¹
KEF055	35 mm	Ø 80 mm	37,10 ¹
KEF056	35 mm	Ø 100 mm	50,50 ¹
KEF040	25 mm	55 x 30 mm	19,80 ¹
KEF041	25 mm	70 x 40 mm	24,10 ¹
KEF042	25 mm	100 x 50 mm	40,80 ¹

Silicone rubber - transparent, with magnetic core, 1 piece

- to fix even very small specimen



	specimen height	dimensions	price €
KEF043	25 mm	Ø 25 mm	29,90
KEF044	25 mm	Ø 30 mm	29,90
KEF030	30 mm	Ø 40 mm	31,00
KEF045	30 mm	Ø 50 mm	37,10
KEF046	35 mm	Ø 60 mm	40,20
KEF047	25 mm	55 x 30 mm	37,10
KEF048	25 mm	70 x 40 mm	41,20
KEF049	25 mm	100 x 50 mm	53,50

¹ quantity discount per item: for orders from 5 pieces 3%, from 10 pieces 5%, from 20 pieces 10%

Embedding moulds and aids

Correctly used every embedding mould is metrichas a long service life

LDPE - transparent, 3 pieces

Embedding



embedding mould with *click

Our newly developed embedding mould is characterized by:

- easy handling: easily solving from the form, smooth removal of prepared sample, to clean easily
- quality: made in Germany, close cooperation with regional companies
- sustainability: waste prevention due to long-term form stability, form durability
- application area: particularly suitable for our acrylates and our UV-curing embedding material CEM UltraLight

	diameter (Ø)	price €
KEF071	25 mm	10,40 ¹
KEF070	30 mm	10,90 ¹
KEF065	40 mm	11,70 ¹
KEF069	50 mm	12,90 ¹

Glass - Borosilicate 3.3, 1 piece



Our new glass embedding moulds promise easy demoulding of ready embedded specimens. Consisting of a glass cylinder made of borosilicate glass 3.3 and a silicone base, the edge of the specimen remains highly transparent and dry during UV curing. Ideally suited for embedding with our CT UltraViLiBo systems.

	diameter (Ø)	price €
KEF066	30 mm	35,00 ²
KEF067	40 mm	40,00 ²
KEF068	50 mm	45,00 ²

Practical aids to fix specimen

MonoClip M - Metal roller springs, 100 pieces



This stainless steel embedding aids allow the fixation of very small and thin-walled embedding materials.

		price €
MonoClipM001	metal roller springs	49,00

MonoClip - made of plastic, 100 pieces



		price €
MonoClip006	black	33,50
MonoClip007	red	33,50
MonoClip008	green	33,50
MonoClip009	yellow	33,50
MonoClip010	blue	33,50
MonoClip012	transparent	33,50
MonoClip011	various color mix	33,50

SampFix - made of plastic, 100 pieces (to fix small flat specimen)



		Ausführung	price €
SampFix001	blue	6 pins with 5 spaces à 1 mm distance	32,00
SampFix002	blue	5 pins with 4 spaces à 2 mm distance	32,00
SampFix003	white	4 pins with 3 spaces à 3 mm distance	32,00
SampFix004		6 pins with 5 spaces à 1 mm distance	32,00
SampFix005	transparent	5 pins with 4 spaces à 2 mm distance	32,00
SampFix006		4 pins with 3 spaces à 3 mm distance	32,00

SixClip - made of plastic, 50 pieces (to fix up to 6 specimens)



		price €
SixClip001	blue	34,50
SixClip002	transparent	34,50

ClipBox - 120 pieces (practical transparent box with a range of all variations of embedding)



		price €
ClipBox001	various color and aids mix	41,20

Fixing paste CEM4001 - light curing, 5 g



		price €
CEM041	one-component-fixing paste	24,20

¹ quantity discount per item: for orders from 5 PU 3%, from 10 PU 5%, from 20 PU 10%

² quantity discount per item: for orders from 10 pieces 5%

Adapter disks

CT GeccoFix is our perfect alternative to all existing adapter disks, no matter if magnetically adhesive on steel disk, if flexible variation on ferro foil, or if self-adhesive itself - all of them are compatible with:

- our no adhesive silicon carbide-/ corundum - wet abrasive paper
- various self-adhesive consumables like e.g. polishing cloths or DIPLAS
- or even rear film coated consumables

Advantages:

very simple handling (consumables could be changed very quickly and easily), good adhesion, steel disks are no longer necessary (lower environmental pollution, great price advantage), easy cleaning (e.g. by water or ethanol; ready for use right after), long service life

Grinding

CT GeccoFix - magnetically adhesive, on steel disk



	diameter (Ø)	packaging unit (pieces)	price €
Gek001	200 mm	1	42,50
Gek004		2	83,00
Gek002	250 mm	1	51,50
Gek005		2	99,00
Gek003	300 mm	1	62,00
Gek006		2	120,00

CT GeccoFix Flex - magnetically adhesive, on ferro foil



	diameter (Ø)	packaging unit (pieces)	price €
Gek007	200 mm	1	35,50
Gek010		2	68,00
Gek013	230 mm	1	39,50
Gek014		2	76,00
Gek008	250 mm	1	41,50
Gek011		2	81,50
Gek009	300 mm	1	51,00
Gek012		2	98,00

CT GeccoFix self-adhesive



	diameter (Ø)	packaging unit (pieces)	price €
Gek015	200 mm	1	35,50
Gek018		2	68,00
Gek021	230 mm	1	39,50
Gek022		2	76,00
Gek016	250 mm	1	41,50
Gek019		2	81,50
Gek017	300 mm	1	51,00
Gek020		2	98,00

GripFix - magnetically adhesive, on ferro foil, 1 piece

We guarantee the changing of at least 80 wet abrasive paper sheets if used correctly.

Application:

After having removed the protective foil (do not discard) the adapter disk surface should be slightly wetted with water. Sticking strength will be reduced a little, whilst remaining more than sufficient for fixing of wet abrasive paper. Our recommendation: Afterwards wet abrasive paper should be removed. If GripFix is no longer required, drying of adhesive surface can be reduced by attaching protective foil again, so you have a durable GripFix - adapter disk.



	diameter (Ø)	price €
GF001	200 mm	10,30
GF002	250 mm	12,90
GF003	300 mm	15,00

MAGAS - magnetic adapter - metal disk with polymer coating

The MAGAS is particularly suitable for fixing self-adhesive wet abrasive paper and polishing cloths. This adapter disk can be adapted to all magnetic systems.



	diameter (Ø)	packaging unit (pieces)	price €
MAS001	200 mm	1	38,50
MAS007		2	75,00
MAS003	250 mm	1	41,50
MAS008		2	81,50
MAS005	300 mm	1	46,50
MAS009		2	90,00

MAGFOL - self-adhesive magnetic foil, 1 piece

With our MAGFOL it is possible to renew a worn magnetic support disk (please remove old coating before first usage and keep attention of evenness) or to modify a non magnetic support disk to a magnetic one.



	diameter (Ø)	price €
MagFol001	200 mm	28,30
MagFol002	250 mm	35,50
MagFol003	300 mm	40,200

Information: more diameters on request (minimum purchase or longer delivery time periods possible)

Diamond surface grinding disks

DIPLAS was developed for manual and automatic specimen preparation.

Areas of application are: all short span forming materials, e.g. steel, cast alloys, ceramics, hard metals, glass and mineralogical materials

DIPLAS Ni is a diamond surface grinding disk with diamonds bound in nickel and DIPLAS Re with diamonds bound in resin, both replace wet abrasive paper in many fields of plane- and fine grinding. DIPLAS Ni is available in diameters \varnothing 200 mm, 250 mm and 300 mm and grain sizes from 120, 200, 400, 600 and 1000, DIPLAS Re up to grain size 3000.

Advantages:

- no need for wet abrasive paper changing
- allows small specimen diameters as no great spaces exist on the disk
- achieve optimal edge sharpness in very short time
- characterized by a very long service life - opposite traditional plane grinding disks a 4-5 times higher surface removal rate can be achieved
- optimal price/performance ratio
- available with rear durable coating - applicable with adapter disks on existing magnetic support systems or on steel disk

Grinding

DIPLAS Ni - self-adhesive, 1 piece

	diameter (\varnothing)	diamond grain	grain size (FEPA)	price €
DIPLAS001	200 mm	D 126	P120	182,00 ¹
DIPLAS002		D 76	P200	133,00 ¹
DIPLAS013		D 40	P400	133,00 ¹
DIPLAS003		D 25	P 600	133,00 ¹
DIPLAS004		D 10	P1000	133,00 ¹
DIPLAS005	250 mm	D 126	P120	233,00 ¹
DIPLAS006		D 76	P200	199,00 ¹
DIPLAS014		D 40	P400	199,00 ¹
DIPLAS007		D 25	P600	199,00 ¹
DIPLAS008	300 mm	D 10	P1000	199,00 ¹
DIPLAS009		D 126	P120	332,00 ¹
DIPLAS010		D 76	P200	294,00 ¹
DIPLAS015		D 40	P400	294,00 ¹
DIPLAS011		D 25	P600	294,00 ¹
DIPLAS012		D 10	P1000	294,00 ¹

DIPLAS Ni S - on steel disk, 1 piece

	diameter (\varnothing)	diamond grain	grain size (FEPA)	price €
DIPLAS040	200 mm	D 126	P120	190,50 ¹
DIPLAS041		D 76	P200	141,00 ¹
DIPLAS042		D 40	P400	141,00 ¹
DIPLAS043		D 25	P600	141,00 ¹
DIPLAS044		D 10	P1000	141,00 ¹
DIPLAS045	250 mm	D 126	P120	244,00 ¹
DIPLAS046		D 76	P200	209,00 ¹
DIPLAS047		D 40	P400	209,00 ¹
DIPLAS048		D 25	P600	209,00 ¹
DIPLAS049	300 mm	D 10	P1000	209,00 ¹
DIPLAS050		D 126	P120	347,00 ¹
DIPLAS051		D 76	P200	308,00 ¹
DIPLAS052		D 40	P400	308,00 ¹
DIPLAS053		D 25	P600	308,00 ¹
DIPLAS054		D 10	P1000	308,00 ¹

Information: more diameters and grain sizes on request; delivery time if out of stock approx. 4 - 5 weeks.



DIPLAS Ni (bound in nickel)



DIPLAS Re (bound in resin)

DIPLAS Re - self-adhesive, 1 piece

	diameter (Ø)	diamond grain	grain size (FEPA)	price €
DIPLAS016	200 mm	D 251	P60	166,00 ¹
DIPLAS017		D 126	P120	166,00 ¹
DIPLAS018		D 76	P200	129,00 ¹
DIPLAS019		D 40	P400	129,00 ¹
DIPLAS020		D 25	P600	129,00 ¹
DIPLAS021		D 10	P1000	129,00 ¹
DIPLAS022		D 1	P3000	129,00 ¹
DIPLAS023	250 mm	D 251	P60	215,00 ¹
DIPLAS024		D 126	P120	215,00 ¹
DIPLAS025		D 76	P200	191,00 ¹
DIPLAS026		D 40	P400	191,00 ¹
DIPLAS027		D 25	P600	191,00 ¹
DIPLAS028		D 10	P1000	191,00 ¹
DIPLAS029		D 1	P3000	191,00 ¹
DIPLAS030	300 mm	D 251	P60	319,00 ¹
DIPLAS031		D 126	P120	319,00 ¹
DIPLAS032		D 76	P200	277,00 ¹
DIPLAS033		D 40	P400	277,00 ¹
DIPLAS034		D 25	P600	277,00 ¹
DIPLAS035		D 10	P1000	277,00 ¹
DIPLAS036		D 1	P3000	277,00 ¹

Grinding

DIPLAS Re S - on steel disk, 1 piece

	diameter (Ø)	diamond grain	grain size (FEPA)	price €
DIPLAS055	200 mm	D 251	P60	174,00 ¹
DIPLAS056		D 126	P120	174,00 ¹
DIPLAS057		D 76	P200	136,00 ¹
DIPLAS058		D 40	P400	136,00 ¹
DIPLAS059		D 25	P600	136,00 ¹
DIPLAS060		D 10	P1000	136,00 ¹
DIPLAS061		D 1	P3000	136,00 ¹
DIPLAS062	250 mm	D 251	P60	225,50 ¹
DIPLAS063		D 126	P120	225,50 ¹
DIPLAS064		D 76	P200	201,00 ¹
DIPLAS065		D 40	P400	201,00 ¹
DIPLAS066		D 25	P600	201,00 ¹
DIPLAS067		D 10	P1000	201,00 ¹
DIPLAS068		D 1	P3000	201,00 ¹
DIPLAS069	300 mm	D 251	P60	335,00 ¹
DIPLAS070		D 126	P120	335,00 ¹
DIPLAS071		D 76	P200	292,00 ¹
DIPLAS072		D 40	P400	292,00 ¹
DIPLAS073		D 25	P600	292,00 ¹
DIPLAS074		D 10	P1000	292,00 ¹
DIPLAS075		D 1	P3000	292,00 ¹

¹ quantity discount per item: for orders from 2 pieces 5%

Diamond surface and fine grinding disks

CT DiaGrit and CT DiaGrit+ (featuring twice the level of diamond concentration) are Diamond surface and fine grinding disks with a very good stock removal rate, archiving optimal edge sharpness and long service life. In many specimen preparations they replace the rough. and fine grinding with wet abrasive paper. The brilliant color-coding makes it easy to see which disk is being used.

All CT DiaGrits (+) are corrosion-resistant and adaptable to all MD discs. They are suitable for materials with a hardness of 150 - 2000 HV.

Before initial use of CT DiaGrit (+) please use our corundum sharpening stone with item no. AZS001 (on page 55)



red - grain size P80

gold - grain size P120

green - grain size P220

blue - grain size P600

black - grain size P1200

Grinding

CT DiaGrit - normal diamond concentration, 1 piece

	diameter (Ø)	grain size (FEPA)	price €
PIATTO001	200 mm	P80	90,00 ¹
PIATTO002		P120	76,00 ¹
PIATTO003		P220	67,50 ¹
PIATTO004		P600	67,50 ¹
PIATTO005		P1200	67,50 ¹
PIATTO006	250 mm	P80	108,50 ¹
PIATTO007		P120	86,00 ¹
PIATTO008		P220	78,50 ¹
PIATTO009	250 mm	P600	78,50 ¹
PIATTO010		P1200	78,50 ¹
PIATTO011		P80	148,00 ¹
PIATTO012	300 mm	P120	122,50 ¹
PIATTO013		P220	108,50 ¹
PIATTO014		P600	108,50 ¹
PIATTO015		P1200	108,50 ¹

CT DiaGrit+ - double Diamond concentration, 1 piece

	diameter (Ø)	grain size (FEPA)	price €
PIATTO016	200 mm	P80+	140,00 ¹
PIATTO017		P120+	116,50 ¹
PIATTO018		P220+	104,50 ¹
PIATTO019		P600+	104,50 ¹
PIATTO020		P1200+	104,50 ¹
PIATTO021	250 mm	P80+	168,00 ¹
PIATTO022		P120+	133,00 ¹
PIATTO023		P220+	120,50 ¹
PIATTO024	250 mm	P600+	120,50 ¹
PIATTO025		P1200+	120,50 ¹
PIATTO026		P80+	227,50 ¹
PIATTO027	300 mm	P120+	188,50 ¹
PIATTO028		P220+	168,00 ¹
PIATTO029		P600+	168,00 ¹
PIATTO030		P1200+	168,00 ¹

¹ Mengenrabatt je Artikel: bei Abnahme ab 5 pieces 5%

Silicone carbide wet abrasive paper - **not** self-adhesive, 100 sheets

	diameter (Ø)	grain size in µm	grain size (FEPA)	price €
NSP105	200 mm	240	P60	78,50 ²
NSP001		196	P80	62,50 ²
NSP002		120	P120	50,50 ²
NSP003		75	P180	45,30 ²
NSP004		65	P220	45,30 ²
NSP005		46	P320	45,30 ²
NSP006		35	P400	45,30 ²
NSP007		30	P500	45,30 ²
NSP008		25	P600	45,30 ²
NSP009		22	P800	45,30 ²
NSP010		18	P1000	45,30 ²
NSP011		15	P1200	45,30 ²
NSP013		10	P2500	55,50 ²
NSP138		5	P4000	96,50 ²
NSP109	5	High Quality P4000	119,50 ²	
NSP106	230 mm	240	P60	93,00 ²
NSP014		196	P80	84,50 ²
NSP015		120	P120	65,00 ²
NSP016		75	P180	58,00 ²
NSP017		65	P220	58,00 ²
NSP018		46	P320	58,00 ²
NSP019		35	P400	58,00 ²
NSP020		30	P500	58,00 ²
NSP021		25	P600	58,00 ²
NSP022		22	P800	58,00 ²
NSP023		18	P1000	58,00 ²
NSP024		15	P1200	58,00 ²
NSP026		10	P2500	69,50 ²
NSP139		5	P4000	128,00 ²
NSP110	5	High Quality P4000	153,50 ²	
NSP107	250 mm	240	P60	106,00 ²
NSP027		196	P80	93,00 ²
NSP028		120	P120	76,00 ²
NSP029		75	P180	64,50 ²
NSP030		65	P220	64,50 ²
NSP031		46	P320	64,50 ²
NSP032		35	P400	64,50 ²
NSP033		30	P500	64,50 ²
NSP034		25	P600	64,50 ²
NSP035		22	P800	64,50 ²
NSP036		18	P1000	64,50 ²
NSP037		15	P1200	64,50 ²
NSP039		10	P2500	78,50 ²
NSP140		5	P4000	140,00 ²
NSP111	5	High Quality P4000	203,00 ²	
NSP108	300 mm	240	P60	152,50 ²
NSP040		196	P80	134,00 ²
NSP041		120	P120	102,50 ²
NSP042		75	P180	90,00 ²
NSP043		65	P220	90,00 ²
NSP044		46	P320	90,00 ²
NSP045		35	P400	90,00 ²
NSP046		30	P500	90,00 ²
NSP047		25	P600	90,00 ²
NSP048		22	P800	90,00 ²
NSP049		18	P1000	90,00 ²

² quantity discount per item: for orders from 5 PU 3%, from 10 PU 6%, from 20 PU 10%

Silicone carbide wet abrasive paper - **not** self-adhesive, 100 sheets

	diameter (Ø)	grain size in µm	grain size (FEPA)	price €
NSP050	300 mm	15	P1200	90,00 ²
NSP052		10	P2500	107,50 ¹
NSP141		5	P4000	205,50 ¹
NSP112		5	High Quality P4000	288,00 ¹
NSP113		240	P60	245,50 ¹
NSP114		120	P120	177,50 ¹
NSP115	350 mm	75	P180	165,50 ¹
NSP116		65	P220	165,50 ¹
NSP117		46	P320	165,50 ¹
NSP118		25	P600	165,50 ¹
NSP119		18	P1000	165,50 ¹

Silicone carbide wet abrasive paper - **self-adhesive**, 100 sheets

	diameter (Ø)	grain size in µm	grain size (FEPA)	price €
NSP054	200 mm	120	P120	87,50 ¹
NSP055		75	P180	82,00 ¹
NSP058		35	P400	82,00 ¹
NSP060		25	P600	82,00 ¹
NSP062		18	P1000	82,00 ¹
NSP063		15	P1200	82,00 ¹
NSP066	230 mm	196	P80	108,50 ^{1,2}
NSP067		120	P120	101,50 ^{1,2}
NSP068		75	P180	96,00 ^{1,2}
NSP069		65	P240	96,00 ^{1,2}
NSP070		46	P320	96,00 ^{1,2}
NSP071		35	P400	96,00 ^{1,2}
NSP072		30	P500	96,00 ^{1,2}
NSP073		25	P600	96,00 ^{1,2}
NSP074		22	P800	96,00 ^{1,2}
NSP075		18	P1000	96,00 ^{1,2}
NSP076	15	P1200	96,00 ^{1,2}	
NSP079	250 mm	196	P80	135,00 ¹
NSP080		120	P120	118,00 ¹
NSP081		75	P180	108,50 ¹
NSP082		65	P240	108,50 ¹
NSP083		46	P320	108,50 ¹
NSP084		35	P400	108,50 ¹
NSP085		30	P500	108,50 ¹
NSP086		25	P600	108,50 ¹
NSP087		22	P800	108,50 ¹
NSP088		18	P1000	108,50 ¹
NSP089	15	P1200	108,50 ¹	
NSP092	300 mm	196	P80	181,50 ¹
NSP093		120	P120	157,00 ¹
NSP094		75	P180	151,50 ¹
NSP095		65	P240	151,50 ¹
NSP096		46	P320	151,50 ¹
NSP097		35	P400	151,50 ¹
NSP098		30	P500	151,50 ¹
NSP099		25	P600	151,50 ¹
NSP100		22	P800	151,50 ¹
NSP101		18	P1000	151,50 ¹
NSP102	15	P1200	151,50 ¹	

Silicone carbide wet abrasive paper - **on film**, 100 sheets

	diameter (Ø)	grain size in µm	grain size (FEPA)	price €
NSP123	250 mm	196	P80	118,50 ¹
NSP124		120	P120	100,50 ¹
NSP146		68	P220	93,00 ¹
NSP125		46	P320	93,00 ¹
NSP126		25	P600	93,00 ¹
NSP127		18	P1000	93,00 ¹
NSP128		15	P1200	93,00 ¹
NSP142		10	P2500	117,50 ¹
NSP144		5	P4000	176,00 ¹
NSP129		196	P80	173,00 ¹
NSP130	120	P120	141,50 ¹	
NSP137	300 mm	65	P240	133,00 ¹
NSP131		46	P320	133,00 ¹
NSP132		25	P600	133,00 ¹
NSP133		18	P1000	133,00 ¹
NSP134		15	P1200	133,00 ¹
NSP143		10	P2500	166,50 ¹
NSP145		5	P4000	250,50 ¹

Information: diameter 200 mm also available, but no stock items - therefore minimum order quantity 15 units à 100 sheets, and 3 weeks delivery time after purchase

Zircon corundum wet abrasive paper - **not self-adhesive**, 25 sheets

	diameter (Ø)	grain size in µm	grain size (FEPA)	price €
Zirko001	200 mm	196	P80	121,00
Zirko004		120	P120	121,00
Zirko002	250 mm	196	P80	121,00
Zirko005		120	P120	121,00
Zirko003	300 mm	196	P80	153,50
Zirko006		120	P120	153,50

Aluminum oxide (corundum) wet abrasive paper - **not self-adhesive**, water resistant, resin bonded, 100 sheets

	diameter (Ø)	grain size in µm	grain size (FEPA)	price €
KSP028	200 mm	196	P80	62,50 ^{1,2}
KSP029		120	P120	50,50 ^{1,2}
KSP001		75	P180	45,50 ^{1,2}
KSP003		46	P320	45,50 ^{1,2}
KSP030	250 mm	196	P80	93,00 ^{1,3}
KSP031		120	P120	76,00 ^{1,3}
KSP010		75	P180	64,50 ^{1,3}
KSP012		46	P320	64,50 ^{1,3}
KSP032	300 mm	196	P80	134,00 ^{1,3}
KSP033		120	P120	102,50 ^{1,3}
KSP019		75	P180	90,00 ^{1,3}
KSP021		46	P320	90,00 ^{1,3}

In general: delivery period if out of stock approx. 3 weeks after purchase

Information: more (1) diameters, (2) grain sizes and (3) Endless-fabric abrasive belts for belt grinding devices on request (minimum purchase or longer delivery time periods are possible)

¹ quantity discount per item: for orders from 5 PU 3%, from 10 PU 6%, from 20 PU 10%

² minimum purchase per grain size: 5 PU

³ minimum purchase per grain size: 2 PU

Grindstone ALPLAS - Al₂O₃, 1 piece

for (hardened) steel, aluminum alloys, ceramics, composite materials and others

Grindstones for the surface grinding of specimen fasteners on AbraPlan or MAPS made by the company Struers.



	grain size (FEPA)	price €
ALPLAS001	A36	297,50
ALPLAS002	A60	297,50
ALPLAS003	A80	297,50
ALPLAS004	A120	297,50
ALPLAS005	A150	297,50
ALPLAS006	A180	297,50

Information: delivery time period, if not on stock ca. 7 - 10 weeks; Grindstones for other grinding devices and pot-grindstones on request (minimum purchase or longer delivery time periods are possible)

Disk-storage-boxes

up to diameter Ø 250 mm - plastic, medium grey, 1 piece

- case outer dimensions: w 298 mm x d 298 mm x h 139 mm
- individual configuration with various drawer heights possible
- stackable
- suitable for storage of polishing cloths, grinding disks and wet abrasive paper (new or used)



	type	dimensions, details	price €
SAB004	case	inner 290 x 290 x 125 mm	84,00
SAB005		height 12 mm, fill level 9 mm	13,10
SAB006	drawer	height 24 mm, fill level 20 mm	15,10
SAB007		height 36 mm, fill level 30 mm	17,30
SAB003	case with 4 drawers	3 x 36 mm, 1 x 12 mm	143,50
SAB002	case with 5 drawers	5 x 24 mm	154,00
SAB001	case with 10 drawers	10 x 12 mm	207,00

up to diameter Ø 300 mm - plastic, medium grey, 1 piece

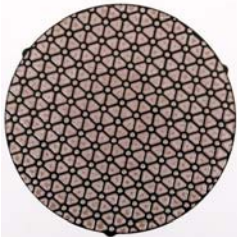
- case outer dimensions: w 480 mm x d 345 mm x h variable depending on case model
- available with various drawer heights
- high-grade, resistant material
- completely extendable drawers with telescopic guidance
- suitable for storage of polishing cloths, grinding disks and wet abrasive paper (new or used)



	type	dimensions, details	price €
SAB011	case with 4 drawers	case height h 215 mm, 2 x à 20 mm fill level 2 x à 55 mm fill level	205,00
SAB010	case with 5 drawers	case height h 355 mm, 5 x à 55 mm fill level	277,00
SAB009	case with 10 drawers	case height h 365 mm, 10 x à 20 mm fill level	359,50

CT GriFin 9 - for lapping with diamond polishing agents from 15 µm to 6 µm

- high abrasion with low distortion-depth
- high evenness and perfect edge sharpness
- savings of 2 - 4 grinding steps with wet abrasive paper
- for materials with a hardness rating > 150 HV



	diameter (Ø)	packaging unit (pieces)	price €
FEGAS001	200 mm	1	49,00
FEGAS007		2	95,00
FEGAS002		5	218,50
FEGAS003	250 mm	1	62,00
FEGAS008		2	121,50
FEGAS004		5	271,50
FEGAS005	300 mm	1	72,00
FEGAS009		2	142,50
FEGAS006		5	316,50

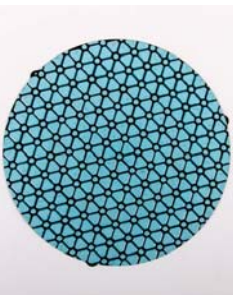
CT GriFin Soft 9 - equal CT GriFin 9 for materials with a hardness rating < 150 HV



	diameter (Ø)	packaging unit (pieces)	price €
Lar001	200 mm	1	49,00
Lar007		2	95,00
Lar002		5	218,50
Lar003	250 mm	1	62,00
Lar008		2	121,50
Lar004		5	271,50
Lar005	300 mm	1	72,00
Lar009		2	142,50
Lar006		5	316,50

CT GriFin 3 - for polishing with diamond polishing agents 3 µm

- optimal edge sharpness and evenness
- no outbreaks of inclusions
- very long service life and no resilience
- perfect price-performance ratio
- integrated diamonds



	diameter (Ø)	packaging unit (pieces)	price €
ALGN001	200 mm	1	49,00
ALGN013		2	95,00
ALGN002		5	218,50
ALGN003	250 mm	1	62,00
ALGN014		2	121,50
ALGN004		5	271,50
ALGN005	300 mm	1	72,00
ALGN015		2	142,50
ALGN006		5	316,50

CT GriFin 1 - equal CT GriFin 3 with diamond polishing agents 1 µm



	diameter (Ø)	packaging unit (pieces)	price €
ALGN007	200 mm	1	49,00
ALGN016		2	95,00
ALGN008		5	218,50
ALGN009	250 mm	1	62,00
ALGN017		2	121,50
ALGN010		5	271,50
ALGN011	300 mm	1	72,00
ALGN018		2	142,50
ALGN012		5	316,50

Polishing cloths

For fine grinding, lapping and pre-polishing

name	areas of application											polishing cloths quality
	ceramics	hard metals	steels	components materials	mineral specimens	sprayed coatings	gray cast iron	copper alloys	aluminum	soft materials	nonferrous materials	
PT Plan	●	●	●	●	●							very hard, extreme flat synthetic fiber cloth
PT Super Plan	●	●	●	●	●	●						very hard, layered chemical fiber cloth with flat surface
PT Super Plan Perforated	●	●	●	●	●	●	●	●	●	●	●	perforated very hard, layered chemical fiber cloth with flat surface
PT Pan	●	●	●	●	●	●						solid, hard and dense chemical fiber cloth

Polishing

PT Plan - 5 pieces

	diameter (Ø)	type	price €
PT001	200 mm	self-adhesive	40,50 ¹
SPT001		on steel disk	58,00 ¹
MPT001		on ferro foil	53,00 ¹
PT002	250 mm	self-adhesive	65,50 ¹
SPT002		on steel disk	85,00 ¹
MPT002		on ferro foil	79,00 ¹
PT003	300 mm	self-adhesive	84,50 ¹
SPT003		on steel disk	108,00 ¹
MPT003		on ferro foil	102,50 ¹

PT Super Plan - 5 pieces

	diameter (Ø)	type	price €
PT022	200 mm	self-adhesive	73,00 ¹
SPT022		on steel disk	91,00 ¹
MPT022		on ferro foil	85,00 ¹
PT023	250 mm	self-adhesive	103,50 ¹
SPT023		on steel disk	123,50 ¹
MPT023		on ferro foil	118,00 ¹
PT024	300 mm	self-adhesive	134,00 ¹
SPT024		on steel disk	158,00 ¹
MPT024		on ferro foil	152,00 ¹

properties

diamond polishing agents

suitable for manually and automatically specimen preparation, high abrasion - very good edge sharpness

15 µm to 3 µm

very long service life, and good evenness, because of no resilience

45 µm to 1 µm

very long service life, and good evenness, because of no resilience

45 µm to 1 µm

low resilience, good evenness and edge sharpness

25 µm to 1 µm

PT Super Plan Perforiert - 5 pieces



	diameter (Ø)	type	price €
PT025	200 mm	self-adhesive	99,50 ¹
SPT025		on steel disk	113,00 ¹
MPT025		on ferro foil	108,00 ¹
PT026	250 mm	self-adhesive	141,00 ¹
SPT026		on steel disk	160,50 ¹
MPT026		on ferro foil	155,00 ¹
PT027	300 mm	self-adhesive	184,50 ¹
SPT027		on steel disk	205,50 ¹
MPT027		on ferro foil	202,50 ¹

PT Pan - 5 pieces



	diameter (Ø)	type	price €
PT004	200 mm	self-adhesive	40,50 ¹
SPT004		on steel disk	58,00 ¹
MPT004		on ferro foil	53,00 ¹
PT005	250 mm	self-adhesive	65,50 ¹
SPT005		on steel disk	85,00 ¹
MPT005		on ferro foil	79,00 ¹
PT006	300 mm	self-adhesive	84,50 ¹
SPT006		on steel disk	108,00 ¹
MPT006		on ferro foil	102,50 ¹

¹ quantity discount per item: for orders from 5 PU 10%

Polishing cloths

For pre-polishing

name	areas of application											polishing cloths quality
	ceramics	hard metals	steels	components materials	mineral specimens	sprayed coatings	gray cast iron	copper alloys	aluminum	soft materials	nonferrous materials	
PT Mol			●				●	●	●	●		woven polishing cloth made from 100% pure new wool
PT Silk			●	●		●	●	●	●		●	medium hard synthetic silk cloth
PT Seda			●	●	●	●	●	●	●		●	medium hard synthetic silk cloth
PT Seda Blue			●	●			●	●			●	medium hard synthetic silk cloth

Polishing

PT Mol - 5 pieces

	diameter (Ø)	type	price €
PT040	200 mm	self-adhesive	48,50 ¹
SPT040		on steel disk	66,00 ¹
MPT040		on ferro foil	59,00 ¹
PT041	250 mm	self-adhesive	72,50 ¹
SPT041		on steel disk	92,00 ¹
MPT041		on ferro foil	85,50 ¹
PT042	300 mm	self-adhesive	85,00 ¹
SPT042		on steel disk	108,50 ¹
MPT042		on ferro foil	102,50 ¹

PT Silk - 5 pieces

	diameter (Ø)	type	price €
PT007	200 mm	self-adhesive	39,50 ¹
SPT007		on steel disk	56,50 ¹
MPT007		on ferro foil	51,50 ¹
PT008	250 mm	self-adhesive	63,00 ¹
SPT008		on steel disk	82,50 ¹
MPT008		on ferro foil	76,50 ¹
PT009	300 mm	self-adhesive	82,00 ¹
SPT009		on steel disk	105,00 ¹
MPT009		on ferro foil	99,50 ¹

properties

diamond polishing materials

new developed, high-quality
good evenness and long service life

9 µm to 3 µm

very good evenness, long service life and
very good polishing result

15 µm to 3 µm


very good evenness and polishing result

6 µm to 0,25 µm

very good evenness and polishing result

6 µm to 0,25 µm

PT Seda - 5 pieces

	diameter (Ø)	type	price €
	200 mm	PT067	self-adhesive 36,20 ¹
		SPT067	on steel disk 53,50 ¹
		MPT067	on ferro foil 48,50 ¹
	250 mm	PT068	self-adhesive 54,50 ¹
		SPT068	on steel disk 74,00 ¹
		MPT068	on ferro foil 69,00 ¹
	300 mm	PT069	self-adhesive 65,00 ¹
		SPT069	on steel disk 87,50 ¹
		MPT069	on ferro foil 82,00 ¹

PT Seda Blue - 5 pieces

	diameter (Ø)	type	price €
	200 mm	PT095	self-adhesive 46,50 ¹
		SPT095	on steel disk 55,50 ¹
	250 mm	PT096	self-adhesive 58,50 ¹
		SPT096	on steel disk 70,00 ¹
	300 mm	PT097	self-adhesive 72,50 ¹
		SPT097	on steel disk 79,00 ¹

¹ quantity discount per item: for orders from 5 PU 10%

Polishing cloths

For fine polishing

name	areas of application											polishing cloths quality
	ceramics	hard metals	steels	components materials	mineral specimens	sprayed coatings	gray cast iron	copper alloys	aluminum	soft materials	nonferrous materials	
PT Flock		●	●					●	●	●		soft, flocked synthetic fiber cloth out of absorbing iscose fibers
PT Plus Violet		●	●					●	●	●		fine pile, robust synthetic fiber cloth
PT Nap			●	●		●	●	●	●	●	●	short pile velvet cloth

Polishing

PT Flock - 5 pieces

	diameter (Ø)	type	price €
PT010	200 mm	self-adhesive	43,00 ¹
SPT010		on steel disk	60,00 ¹
MPT010		on ferro foil	55,00 ¹
PT011	250 mm	self-adhesive	66,00 ¹
SPT011		on steel disk	84,50 ¹
MPT011		on ferro foil	79,00 ¹
PT012	300 mm	self-adhesive	79,50 ¹
SPT012		on steel disk	102,50 ¹
MPT012		on ferro foil	97,00 ¹

PT Plus Violet - 5 pieces

	diameter (Ø)	type	price €
PT074	200 mm	self-adhesive	56,00 ¹
SPT074		on steel disk	79,00 ¹
PT075	250 mm	self-adhesive	76,50 ¹
SPT075		on steel disk	104,50 ¹
PT076	300 mm	self-adhesive	96,00 ¹
SPT076		on steel disk	133,00 ¹

properties

diamond polishing materials

very good evenness and specimen surface

3 µm and finer

very good evenness, long service life and good polishing result

3 µm and finer, oxide polishing agents

very good evenness, long service life

3 µm and finer, oxide polishing agents

PT Nap - 5 pieces



	diameter (Ø)	type	price €
PT031	200 mm	self-adhesive	54,00 ¹
SPT031		on steel disk	71,50 ¹
MPT031		on ferro foil	66,00 ¹
PT032	250 mm	self-adhesive	80,00 ¹
SPT032		on steel disk	100,00 ¹
MPT032		on ferro foil	94,00 ¹
PT033	300 mm	self-adhesive	95,50 ¹
SPT033		on steel disk	116,00 ¹
MPT033		on ferro foil	110,00 ¹

¹ quantity discount per item: for orders from 5 PU 10%

Polishing cloths

For final polishing

name	areas of application											polishing cloths quality
	ceramics	hard metals	steels	components materials	mineral specimens	sprayed coatings	gray cast iron	copper alloys	aluminum	soft materials	nonferrous materials	
PT Skin			●	●	●	●	●	●	●	●	●	leathery (dense, not woven) synthetic cloth out of 100% polyester fibers
PT Chem	●	●	●	●	●	●	●	●	●	●	●	porous, soft synthetic cloth
PT Chem Perforated	●	●	●	●	●	●	●	●	●	●	●	perforated porous, soft synthetic cloth

Polishing

PT Skin - 5 pieces

	diameter (Ø)	type	price €
PT089	200 mm	self-adhesive	39,50 ¹
SPT089		on steel disk	56,50 ¹
MPT089		on ferro foil	51,50 ¹
PT090	250 mm	self-adhesive	63,00 ¹
SPT090		on steel disk	82,50 ¹
MPT090		on ferro foil	76,50 ¹
PT091	300 mm	self-adhesive	82,00 ¹
SPT091		on steel disk	105,00 ¹
MPT091		on ferro foil	99,50 ¹

PT Chem - 5 pieces

	diameter (Ø)	type	price €
PT016	200 mm	self-adhesive	59,00 ¹
SPT016		on steel disk	76,50 ¹
PT017	250 mm	self-adhesive	85,00 ¹
SPT017		on steel disk	105,00 ¹
PT018	300 mm	self-adhesive	110,50 ¹
SPT018		on steel disk	122,00 ¹

properties

diamond polishing materials

very good evenness

3 µm and finer,
oxide polishing agents

chemical resistant, good evenness

oxide polishing agents

chemical resistant, suction effect is eliminated
especially in large-scale specimen, short polishing time
good evenness, low polishing agent consumption

oxide polishing agents

PT Chem Perforiert - 5 pieces



	diameter (Ø)	type	price €
PT028	200 mm	self-adhesive	66,00 ¹
SPT028		on steel disk	82,50 ¹
PT029	250 mm	self-adhesive	92,50 ¹
SPT029		on steel disk	111,50 ¹
PT030	300 mm	self-adhesive	119,00 ¹
SPT030		on steel disk	142,00 ¹

Polishing cloths in special dimensions

Information:

more diameters as like 73 mm, 98 mm etc. on request (minimum purchase and longer delivery time period possible)

¹ quantity discount per item: for orders from 5 PU 10%

Diamond suspensions - mono- and polycrystalline

with color coding system

15 µm - brown / 9 µm - Red / 6 µm - Yellow / 3 µm - Green / 1 µm - Blue / 0,25 µm Violet / 0,1 µm Orange

Simple dosage of diamonds as well for manually specimen preparation as for automatically.

Our CT Diamond suspensions are developed with regard to following aspects:

- environmental friendliness
- reproducible results
- short specimen preparation time

diamond grain sizes:

- mono: 1 µm, 3 µm, 6µm, 9 µm and 15 µm (dyed and labeled - color coding system)
- poly: 0,1 µm, 0,25 µm, 1 µm, 3 µm, 6 µm, 9 µm and 15 µm (labeled - color coding system)

monocrystalline

Diamond suspensions - water-based, 20 ct/l

	diamond grain in µm	bundle	price €
DSU-M001-CT	15	250 ml	31,00 ^{1,2}
DSU-M006-CT		1 liter	105,00 ¹
DSU-M011-CT		2,5 liters	242,00 ¹
DSU-M002-CT	9	250 ml	31,00 ^{1,2}
DSU-M007-CT		1 liter	105,00 ¹
DSU-M012-CT		2,5 liters	242,00 ¹
DSU-M003-CT	6	250 ml	31,00 ^{1,2}
DSU-M008-CT		1 liter	105,00 ¹
DSU-M013-CT		2,5 liters	242,00 ¹
DSU-M004-CT	3	250 ml	31,00 ^{1,2}
DSU-M009-CT		1 liter	105,00 ¹
DSU-M014-CT		2,5 liters	242,00 ¹
DSU-M005-CT	1	250 ml	31,00 ^{1,2}
DSU-M010-CT		1 liter	105,00 ¹
DSU-M015-CT		2,5 liters	242,00 ¹



Polishing

Diamond suspensions + - water-based, 40 ct/l

	diamond grain in µm	bundle	price €
DSU-M016-CT	15	250 ml	42,50 ^{1,2}
DSU-M021-CT		1 liter	146,50 ¹
DSU-M026-CT		2,5 liters	350,50 ¹
DSU-M017-CT	9	250 ml	42,50 ^{1,2}
DSU-M022-CT		1 liter	146,50 ¹
DSU-M027-CT		2,5 liters	350,50 ¹
DSU-M018-CT	6	250 ml	42,50 ^{1,2}
DSU-M023-CT		1 liter	146,50 ¹
DSU-M028-CT		2,5 liters	350,50 ¹
DSU-M019-CT	3	250 ml	42,50 ^{1,2}
DSU-M024-CT		1 liter	146,50 ¹
DSU-M029-CT		2,5 liters	350,50 ¹
DSU-M020-CT	1	250 ml	42,50 ^{1,2}
DSU-M025-CT		1 liter	146,50 ¹
DSU-M030-CT		2,5 liters	350,50 ¹



Diamond suspensions alcohol-based - 20 ct/l

especially suitable for specimen preparation of water-sensitive materials



	diamond grain in μm	bundle	price €
DSUA-M006-CT	15	1 liter	118,50 ¹
DSUA-M007-CT	9	1 liter	118,50 ¹
DSUA-M008-CT	6	1 liter	118,50 ¹
DSUA-M009-CT	3	1 liter	118,50 ¹
DSUA-M010-CT	1	1 liter	118,50 ¹

Diamond suspensions anhydrous - 20 ct/l

our further development, and no dangerous goods anymore (related to freight purposes)



	diamond grain in μm	bundle	price €
DSUWF-M001-CT		250 ml	34,00 ^{1,2}
DSUWF-M006-CT	15	1 liter	121,50 ¹
DSUWF-M002-CT		250 ml	34,00 ^{1,2}
DSUWF-M007-CT	9	1 liter	121,50 ¹
DSUWF-M003-CT		250 ml	34,00 ^{1,2}
DSUWF-M008-CT	6	1 liter	121,50 ¹
DSUWF-M004-CT		250 ml	34,00 ^{1,2}
DSUWF-M009-CT	3	1 liter	121,50 ¹
DSUWF-M005-CT		250 ml	34,00 ^{1,2}
DSUWF-M010-CT	1	1 liter	121,50 ¹

polycrystalline

Diamond suspensions - water-based, 20 ct/l



	diamond grain in μm	bundle	price €
DSU-P001-CT		250 ml	50,50 ^{1,2}
DSU-P008-CT	15	1 liter	184,50 ¹
DSU-P015-CT		2,5 liters	444,00 ¹
DSU-P002-CT		250 ml	50,50 ^{1,2}
DSU-P009-CT	9	1 liter	184,50 ¹
DSU-P016-CT		2,5 liters	444,00 ¹
DSU-P003-CT		250 ml	50,50 ^{1,2}
DSU-P010-CT	6	1 liter	184,50 ¹
DSU-P017-CT		2,5 liters	444,00 ¹
DSU-P004-CT		250 ml	50,50 ^{1,2}
DSU-P011-CT	3	1 liter	184,50 ¹
DSU-P018-CT		2,5 liters	444,00 ¹
DSU-P005-CT		250 ml	50,50 ^{1,2}
DSU-P012-CT	1	1 liter	184,50 ¹
DSU-P019-CT		2,5 liters	444,00 ¹
DSU-P006-CT		250 ml	50,50 ^{1,2}
DSU-P013-CT	0,25	1 liter	184,50 ¹
DSU-P020-CT		2,5 liters	444,00 ¹
DSU-P007-CT		250 ml	85,00 ^{1,2}
DSU-P014-CT	0,1	1 liter	227,00 ¹
DSU-P021-CT		2,5 liters	607,50 ¹

Information: more grain sizes, concentrations and viscosities on request

¹ quantity discount per item: for orders from 3 pieces 5%, from 10 pieces 10%

² 250 ml bundles will be delivered with additional spray head

Polishing agents

Diamond suspensions + - water-based, 40 ct/l



	diamond grain in μm	bundle	price €
DSU-P025-CT	15	250 ml	74,00 ^{1,2}
DSU-P030-CT		1 liter	261,50 ¹
DSU-P026-CT	9	250 ml	74,00 ^{1,2}
DSU-P031-CT		1 liter	261,50 ¹
DSU-P027-CT	6	250 ml	74,00 ^{1,2}
DSU-P032-CT		1 liter	261,50 ¹
DSU-P028-CT	3	250 ml	74,00 ^{1,2}
DSU-P033-CT		1 liter	261,50 ¹
DSU-P029-CT	1	250 ml	74,00 ^{1,2}
DSU-P034-CT		1 liter	261,50 ¹

Diamond suspensions alcohol-based - 20 ct/l

especially suitable for specimen preparation of water-sensitive materials



	diamond grain in μm	bundle	price €
DSUA-P001-CT	15	250 ml	58,50 ^{1,2}
DSUA-P008-CT		1 liter	215,50 ¹
DSUA-P002-CT	9	250 ml	58,50 ^{1,2}
DSUA-P009-CT		1 liter	215,50 ¹
DSUA-P003-CT	6	250 ml	58,50 ^{1,2}
DSUA-P010-CT		1 liter	215,50 ¹
DSUA-P004-CT	3	250 ml	58,50 ^{1,2}
DSUA-P011-CT		1 liter	215,50 ¹
DSUA-P005-CT	1	250 ml	58,50 ^{1,2}
DSUA-P012-CT		1 liter	215,50 ¹
DSUA-P006-CT	0,25	250 ml	58,50 ^{1,2}
DSUA-P013-CT		1 liter	215,50 ¹

Diamond suspensions anhydrous - 20 ct/l

our further development, and no dangerous goods anymore (related to freight purposes)



	diamond grain in μm	bundle	price €
DSUWF-P001-CT	15	250 ml	56,50 ^{1,2}
DSUWF-P008-CT		1 liter	202,00 ¹
DSUWF-P002-CT	9	250 ml	56,50 ^{1,2}
DSUWF-P009-CT		1 liter	202,00 ¹
DSUWF-P003-CT	6	250 ml	56,50 ^{1,2}
DSUWF-P010-CT		1 liter	202,00 ¹
DSUWF-P004-CT	3	250 ml	56,50 ^{1,2}
DSUWF-P011-CT		1 liter	202,00 ¹
DSUWF-P005-CT	1	250 ml	56,50 ^{1,2}
DSUWF-P012-CT		1 liter	202,00 ¹
DSUWF-P006-CT	0,25	250 ml	56,50 ^{1,2}
DSUWF-P013-CT		1 liter	202,00 ¹

¹ quantity discount per item: for orders from 3 pieces 5%, from 10 pieces 10%

² 250 ml bundles will be delivered with additional spray head

Our Lubricants were manufactured based on newest knowledge about cooling lubricant development, which are different in thickness of lubricating film.

water-based

Our water-based lubricants are produced with a special protective coating system, therefore they are mild to the skin and biodegradable.

- Lubricant Green - thin lubricating film
- Lubricant Yellow - medium lubricating film
- Lubricant Red - thick lubricating film



		bundle	price €
LU-G001		1 liter	17,40
LU-G002	Lubricant Green	5 liters	61,20
LU-G004		25 liters (5 x 5 liters)	249,00
LU-Y001		1 liter	17,40
LU-Y002	Lubricant Yellow	5 liters	61,20
LU-Y004		25 liters (5 x 5 liters)	249,00
LU-R001		1 liter	17,40
LU-R002	Lubricant Red	5 liters	61,20
LU-R004		25 liters (5 x 5 liters)	249,00

water- and alcohol-based

Lubricant Türkis - special lubricant with corrosion protection, very thin for polishing with water-based diamond polishing agents, leaves neither lubricating film nor



		bundle	price €
LU-T001		1 liter	10,70
LU-T002	Lubricant Türkis	5 liters	48,00
LU-T003		10 Liter (2 x 5 liters)	83,00

alcohol-based

All of our alcohol-based lubricants offer water content of < 0,1 %.

- Lubricant Blue - thin lubricating film



		bundle	price €
LU-B001		1 liter	17,40
LU-B002	Lubricant Blue	5 liters	64,30 ¹
LU-B003		10 Liter (2 x 5 liters)	110,00 ¹

¹ additional dangerous goods transport fee per package (max 30 kg) within Germany is currently 10,00 EUR - see delivery conditions on page 70; in foreign countries delivery possible in 1 Liter containers only

Polishing agents with lubricants

Two-In-One Diamond suspensions - mono- and polycrystalline with color coding system

15 µm - Brown / 9 µm - Red / 6 µm - Yellow / 3 µm - Green / 1 µm - Blue / 0,25 µm Violet / 0,1 µm Orange

CT DiaTwin is a finished mixture of diamond suspension and lubricant, permanently stable, so reproducible results are guaranteed. The increased abrasion of our lubricants was retained completely, so you can expect up to 30 - 50 % shorter specimen preparation time (CT DiaTwin Poly). Please try as well application with our pump spray bottles or our dosing system CT Doser for correctly manual dosage. Another idea is to exploit now available spaces for lubricants in your own automatic dosing system for various grain sizes.

- simple handling
- short specimen preparation time
- reproducible results
- water-based, not subject to labelling
- biodegradable

diamond grain sizes:

- mono: 1 µm, 3 µm, 6 µm, 9 µm and 15 µm (dyed and labeled - color coding system)
- poly: 0,25 µm, 1 µm, 3 µm, 6 µm, 9 µm and 15 µm (labeled - color coding system)

monocrystalline

CT DiaTwin - water-based, 10 ct/l



	diamond grain in µm	bundle	price €
DDO-M001-CT	15	500 ml	26,50 ^{1,2}
DDO-M006-CT		5 liters	222,50 ¹
DDO-M002-CT	9	500 ml	26,50 ^{1,2}
DDO-M007-CT		5 liters	222,50 ¹
DDO-M003-CT	6	500 ml	26,50 ^{1,2}
DDO-M008-CT		5 liters	222,50 ¹
DDO-M004-CT	3	500 ml	26,50 ^{1,2}
DDO-M009-CT		5 liters	222,50 ¹
DDO-M005-CT	1	500 ml	26,50 ^{1,2}
DDO-M010-CT		5 liters	222,50 ¹

CT DiaTwin Max - water-based, 20 ct/l



	diamond grain in µm	bundle	price €
DDO-M011-CT	15	500 ml	38,50 ^{1,2}
DDO-M016-CT		5 liters	326,50 ¹
DDO-M012-CT	9	500 ml	38,50 ^{1,2}
DDO-M017-CT		5 liters	326,50 ¹
DDO-M013-CT	6	500 ml	38,50 ^{1,2}
DDO-M018-CT		5 liters	326,50 ¹
DDO-M014-CT	3	500 ml	38,50 ^{1,2}
DDO-M019-CT		5 liters	326,50 ¹
DDO-M015-CT	1	500 ml	38,50 ^{1,2}
DDO-M020-CT		5 liters	326,50 ¹

¹ quantity discount per item: for orders from 3 pieces 5%, from 10 pieces 10%

² 500 ml bundles will be delivered with additional spray head

CT DiaTwin anhydrous - 10 ct/l

our further development, and no dangerous goods anymore (related to freight purposes)



	diamond grain in μm	bundle	price €
DDOWF-M001-CT	15	500 ml	45,50 ^{1,2}
DDOWF-M002-CT	9	500 ml	45,50 ^{1,2}
DDOWF-M003-CT	6	500 ml	45,50 ^{1,2}
DDOWF-M004-CT	3	500 ml	45,50 ^{1,2}
DDOWF-M005-CT	1	500 ml	45,50 ^{1,2}

polycrystalline

CT DiaTwin - water-based, 10 ct/l



	diamond grain in μm	bundle	price €
DDO-P001-CT	15	500 ml	53,00 ^{1,2}
DDO-P006-CT		5 liters	453,00 ¹
DDO-P002-CT	9	500 ml	53,00 ^{1,2}
DDO-P007-CT		5 liters	453,00 ¹
DDO-P003-CT	6	500 ml	53,00 ^{1,2}
DDO-P008-CT		5 liters	453,00 ¹
DDO-P004-CT	3	500 ml	53,00 ^{1,2}
DDO-P009-CT		5 liters	453,00 ¹
DDO-P005-CT	1	500 ml	53,00 ^{1,2}
DDO-P010-CT		5 liters	453,00 ¹

CT DiaTwin Max - water-based, 20 ct/l



	diamond grain in μm	bundle	price €
DDO-P011-CT	15	500 ml	83,50 ^{1,2}
DDO-P016-CT		5 liters	682,00 ¹
DDO-P012-CT	9	500 ml	83,50 ^{1,2}
DDO-P017-CT		5 liters	682,00 ¹
DDO-P013-CT	6	500 ml	83,50 ^{1,2}
DDO-P018-CT		5 liters	682,00 ¹
DDO-P014-CT	3	500 ml	83,50 ^{1,2}
DDO-P019-CT		5 liters	682,00 ¹
DDO-P015-CT	1	500 ml	83,50 ^{1,2}
DDO-P020-CT		5 liters	682,00 ¹

CT DiaTwin anhydrous - 10 ct/l

our further development, and no dangerous goods anymore (related to freight purposes)



	diamond grain in μm	bundle	price €
DDOWF-P001-CT	15	500 ml	77,50 ^{1,2}
DDOWF-P002-CT	9	500 ml	77,50 ^{1,2}
DDOWF-P003-CT	6	500 ml	77,50 ^{1,2}
DDOWF-P004-CT	3	500 ml	77,50 ^{1,2}
DDOWF-P005-CT	1	500 ml	77,50 ^{1,2}
DDOWF-P006-CT	0,25	500 ml	77,50 ^{1,2}

Information: more grain sizes, concentrations and viscosities on request

Polishing agents

Diamond pastes - mono- and polycrystalline - 1 piece, 500ct/l, 10 g syringe with color coding system

Our Diamond paste has a very high diamond concentration, therefore with a very small portion of it a high abrasion becomes true. The Diamond paste is perfectly suitable for mobile component inspection / Materialography.

- mono: 1 μm , 3 μm , 6 μm , 9 μm and 15 μm (labeled - color coding system)
- poly: 0,1 μm , 0,25 μm , 1 μm , 3 μm , 6 μm , 9 μm and 15 μm (labeled - color coding system)

monocrystalline



	diamond grain in μm	price €
DPA-M003-CT	15	30,00 ¹
DPA-M004-CT	9	30,00 ¹
DPA-M005-CT	6	30,00 ¹
DPA-M006-CT	3	30,00 ¹
DPA-M007-CT	1	30,00 ¹

polycrystalline



	diamond grain in μm	price €
DPA-P010-CT	15	53,50 ¹
DPA-P011-CT	9	53,50 ¹
DPA-P012-CT	6	53,50 ¹
DPA-P013-CT	3	53,50 ¹
DPA-P014-CT	1	53,50 ¹
DPA-P015-CT	0,25	68,00 ¹
DPA-P016-CT	0,1	80,50 ¹

Diamond sticks - mono- and polycrystalline - 1 piece, 250 ct/l, 20g stick with color coding system

Diamond sticks are mainly used for manual polishing. The polishing cloth quickly takes the diamonds out of the diamond stick and can be used while the polishing disk rotates as well. Our Diamond stick is compatible with water-, glycol- and ethanol-based lubricants, contains water less than 0.1 % and is perfectly suitable for anhydrous specimen preparation. The large diamond concentration ensures a high abrasion.

- mono: 1 μm , 3 μm , 6 μm , 9 μm and 15 μm (labeled - color coding system)
- poly: 0,25 μm , 1 μm , 3 μm , 6 μm , 9 μm and 15 μm (labeled - color coding system)

monocrystalline



	diamond grain in μm	price €
DST-M001	9	51,00
DST-M002	6	51,00
DST-M003	3	51,00
DST-M004	1	51,00

polycrystalline



	diamond grain in μm	price €
DST-P001	9	90,50
DST-P002	6	90,50
DST-P003	3	90,50
DST-P004	1	90,50
DST-P005	0,25	90,50

¹quantity discount per item: for orders from 3 pieces 5%, from 10 pieces 10%

Diamond sprays - mono- and polycrystalline

with color coding system

Our CT Diamond sprays are developed with regard to following aspects:
short specimen preparation time · anhydrous polishing · environmental friendliness

1. classic compressed gas spray
and our alternatives:

2. Cloeren NH-diamond spray (non-flammable)
3. Cloeren diamond pump spray (low odor)

both are without compressed air, but with the same properties and with larger diamond concentration
(30 ct/l instead of 26,5 ct/l).

monocrystalline

Diamond spray - 1 piece, 26,5 ct/l, 150 ml



	diamond grain in μm	price €
DSP-M002	9	44,50
DSP-M003	6	44,50
DSP-M004	3	44,50
DSP-M005	1	44,50

Diamond spray **non-flammable** - 1 piece, 30 ct/l, 150 ml



	diamond grain in μm	price €
DSP-M006-CT	15	35,50 ¹
DSP-M007-CT	9	35,50 ¹
DSP-M008-CT	6	35,50 ¹
DSP-M009-CT	3	35,50 ¹
DSP-M010-CT	1	35,50 ¹

Diamond pump spray - 1 piece, 30 ct/l, 150 ml



	diamond grain in μm	price €
DPS-M001-CT	9	35,50 ¹
DPS-M002-CT	6	35,50 ¹
DPS-M003-CT	3	35,50 ¹
DPS-M004-CT	1	35,50 ¹

polycrystalline

Diamond spray - 1 piece, 26,5 ct/l, 150 ml



	diamond grain in μm	price €
DSP-P002	9	62,00
DSP-P003	6	62,00
DSP-P004	3	62,00
DSP-P005	1	62,00
DSP-P006	0,25	62,00

Diamond spray **non-flammable** - 1 piece, 30 ct/l, 150 ml



	diamond grain in μm	price €
DSP-P008-CT	15	47,50 ¹
DSP-P009-CT	9	47,50 ¹
DSP-P010-CT	6	47,50 ¹
DSP-P011-CT	3	47,50 ¹
DSP-P012-CT	1	47,50 ¹
DSP-P013-CT	0,25	47,50 ¹

Diamond pump spray - 1 piece, 30 ct/l, 150 ml



	diamond grain in μm	price €
DPS-P001-CT	9	47,50 ¹
DPS-P002-CT	6	47,50 ¹
DPS-P003-CT	3	47,50 ¹
DPS-P004-CT	1	47,50 ¹

Final polishing agents

Silica Suspensions

oxide polishing material for chemical and mechanical final polishing



For an optimal materialographic specimen preparation the final polishing with our silica suspensions is recommended.

Our offer a large choice of silica suspensions, which are finely tuned for various desires while final polishing different materials:

- a unique system to prevent crystallization
- water evaporation is reduced > precipitated crystals will be dissolved again > lifetime of polishing cloth will be extended
- results free of artefacts (development of a maintain microstructure)
- various grain structures
- grain sizes distributions from 0,2 µm to 0,05 µm (from 200 nm to 50 nm)
- anhydrous suspension
- ethane diol instead of water > purely mechanical effect

Polishing

	type	condition	grain sizes distribution	bundle	price €
OxyPol001	colloidal	alkaline	50 nm / 0,05 µm	1 liter	38,50
OxyPol002				5 liters	159,50
OxyPol007	fumed	alkaline	200 nm / 0,2 µm	1 liter	31,50
OxyPol008				5 liters	124,00
OxyPol009		anhydrous	1 liter	60,00	
OxyPol010			5 liters	237,00	

Aluminum oxide polishing agents - suitable for plastics as well

	type	pH-value	grain sizes distribution	bundle	price €
OxyPol011	suspension	3,4	1000 nm / 1 µm	1 liter	46,50
OxyPol012				5 liters	199,50



Alumina polishing agents

	type	pH-value	grain sizes distribution	bundle	price €
TONPOL007	suspension	~ 5-6	15.000 nm/ 15 µm	1 kg	37,00
TONPOL001			1.000 nm / 1 µm	1 kg	37,00
TONPOL006			500 nm / 0,5 µm	1 kg	42,10
TONPOL003	powder	~ 7	250 nm / 0,25 µm	1 kg	86,50
TONPUL001			1000 nm / 1 µm	1 kg	97,00
TONPUL002			k.A.	500 nm / 0,5 µm	1 kg
TONPUL003			300 - 500 nm / 0,3 - 0,5 µm	1 kg	55,50

¹ additional dangerous goods transport fee per package (max 30 kg) within Germany is currently 10,00 EUR - see delivery conditions on page 70; in foreign countries delivery possible in 1 Liter containers only

Solvents and Cleaning agents

Rubbing alcohol - ethanol denatured, 99,9%



	bundle	price €
Clean001	1 liter	10,90
Clean002	5 liters	39,80 ¹
Clean003	10 liters (2 x 5 liters)	72,50 ¹
Clean004	25 liters (5 x 5 liters)	171,00 ¹

Solvent acetone - inter alia for wetting the triacetate foil

	bundle	price €
ÄtzM041	1 liter	33,50

Ultrasonic-Cleaner

special ultrasonic cleaner with corrosion protection, water-based

properties:

- specially developed for cleaning of steel specimens for automatic purity level-determination after polishing on fully automatic grinding and polishing machines
- a very good alternative for cleaning final prepared specimen surfaces
- leave no lubricating film or other deposits on prepared specimen surface
- for cleaning water sensitive specimen, like e.g. zinc layers on steel, applicable in ultrasonic unit
- cleans quickly and reliably as well as corrosion-resistant as no corrosion-resistant materials
- non-flammable and oil-containing substances
- odorless



	bundle	price €
Clean010	1 liter	10,90
Clean011	5 liters	49,00
Clean012	10 liters (2 x 5 liters)	84,50

Etching agents

Nitric acid



	type	HNO ₃ concentration	bundle	price €
ÄtzM002	alcoholic	3%	1 liter	28,00
ÄtzM003			2,5 liters	60,50 ¹
ÄtzM008			5 liters	120,50 ¹
ÄtzM004			1 liter	32,00
ÄtzM005			2,5 liters	71,00 ¹
ÄtzM009	aqueous	5%	5 liters	137,00 ¹
ÄtzM006			1 liter	29,00
ÄtzM007			2,5 liters	64,50
ÄtzM010			5 liters	123,50
ÄtzM019			10%	1 liter

Picric acid - soft annealed carbon steels



	2,4,6-trinitrophenol concentration	type	bundle	price €
ÄtzM015	5%	alcoholic	1 liter	55,50

Sodium hydroxide solution



	NaOH concentration	for etching of e.g.	bundle	price €
ÄtzM031	15%	aluminum, Al-alloys	1 liter	45,50
ÄtzM032	10%	(electrolytic) as detection of ferrite and sigma phase	1 liter	43,00

Etching agents

more various etching agents

	name	for etching of e.g.	bundle	price €
ÄtzM001	Adler etching	chrome-nickel steels, velvet joints	1 liter	37,00
ÄtzM013	Copper ammonium chloride + ammonia	copper and copper alloys	1 liter 100ml	37,00
ÄtzM014	V2A mordant	chrome-nickel steels	1 liter	32,00
ÄtzM016	etching agent by Beraha II	high alloyed steels	1 liter stock solution 10 g potassium disulfide	57,00
ÄtzM029	primary etching agent by Le Chatelier	the development of the microstructure of steel	1 liter	44,00
ÄtzM030	etching agent by Oberhoffer	cast iron, steel liquation, stretcher strain marks	1 liter	32,00
ÄtzM034	etching agent by Kalling II	nickel-base alloys, high alloyed steels	1 liter	44,00
ÄtzM035	etching agent by Bechet-Beaujard	visualization of the former austenite grain boundaries in low alloyed heat treatable steels	1 liter	41,00
ÄtzM038	etching agent by Klemm I	visualization of microstructure in unalloyed and low alloyed steels and cast iron	1 liter stock solution 20 g potassium disulfide	54,00
ÄtzM039	etching agent by Klemm II	copper alloys and soft solder connections	1 liter stock solution 50 g potassium disulfide	57,00
ÄtzM040	etching agent by Murakami	high-contrast and color differentiation of austenite, ferrite and sigma phase in e.g. duplex / super duplex steels	1 liter	43,00
ÄtzM045	etching agent by Fry B	macro etching agent for the preparation of cold deformations in nitrogenous alloys, e.g. arise during stamping and bending	1 liter	45,50

electrolytic etching agents

	name	for etching of e.g.	bundle	price €
ÄtzM011	Electrolyte CT-A2	Steel, high speed steel, aluminum and aluminum alloys, stainless steel	1 liter 78 ml perchloric acid 70% p.A.	43,00 ¹
ÄtzM020	Electrolyte CT-A3	Stainless steels, martensitic steels, molybdenum, titanium, zirconium, vanadium	1 liter 60 ml perchloric acid 70% p.A.	55,50 ¹
ÄtzM021	Electrolyte CT-AC2	Cast iron, magnesium, magnesium alloys, nickel, Nimonic, carbon steels, stainless steels, beryllium	1 liter 15 ml perchloric acid 70% p.A.	55,50 ¹
ÄtzM022	Electrolyte CT-D2	Copper, copper alloys, brass	1 liter	58,50
ÄtzM012	etching agent by CT-Barker	aluminum and aluminum alloys	1 liter	58,50
ÄtzM032	sodium hydroxide solution 10%	as detection of ferrite and sigma phase	1 liter	43,00

Information: more electrolytic etching agents on request (minimum purchase and longer delivery time period possible)

¹ additional dangerous goods transport fee per package (max. 30 kg) within Germany is currently 16,00 EUR - see delivery conditions on page 70; in foreign countries delivery possible with considerable added costs - specific prices here fore on request

Cutting

corundum sharpening stone - 1 piece

for free-cutting of diamond cutting / grinding discs



AZS001

price €
8,90

Embedding

pressure pot - 1 piece

new version with a capacity of 6 liters



for bubbles- and pores free curing of cold embedding material CEM3020
compressed air connection (2 bar) or compressor required,
dimensions: Ø 255 mm, height 170 mm, Volume 6 liters, incl. 1 m filling hose

Zub023

price €
317,00

mixing cups - 10 pieces

200 ml, white, thin-walled card, inside PE coated



Zub002

price €
2,30

wooden spatulas - 50 pieces

10 x 140 mm



Zub001

price €
2,30

measuring spoons - 5 pieces

plastic, transparent, 17ml, 158 mm long



Zub020

price €
3,00

release agent - 400 ml

for press- and embedding moulds, silicone free, service temperature up to +120 °C,
short term even higher



TrenM001

price €
17,50

Grinding

adhesive spray - 400 ml

for fixing non adhesive wet abrasive paper on adapter disks, simple handling, disposal
of adhesive residues without solvent possible



HSK001

price €
25,50

Grinding

steel disks - 1 piece

stainless high-grade steel, thickness 0,8 mm, unilateral grinded, outer dimensions 34 mm, for manual adaption of self-adhesive polishing cloths or wet abrasive paper



	diameter (Ø)	price €
StahIS001	200 mm	4,20
StahIS002	250 mm	5,90
StahIS003	300 mm	8,00

Polishing

spray dispensing bottles

bottlers with spray head for diamond suspensions and lubricants



	size	bundle	price €
DFL005	250 ml	1 piece	4,00
DFL006		3 pieces	10,20
DFL003	500 ml	1 piece	4,40
DFL004		3 pieces	11,30

CT Doser

our dosing system for manual dosing of diamond suspensions, lubricants and Two-In-One polishing agents, very fine dosing by adjustable dripping mechanism

CT Doser set



storage rack with drip device incl. 4 different colored bottle markers, 4 dosage bottles á 250 ml, high tripod with arm for holding dosage bottles, funnel for filling each dosage bottle

	price €
CTDoser001	630,50

CT Doser accessories

	description	price €
CTDoser002	storage rack with drip device (very fine dosing) incl. 4 different colored bottle markers, 4 dosage bottles á 250 ml	452,00
CTDoser003	replacement dosage bottle with drip device (very fine dosing)	47,50
CTDoser004	high tripod with arm for holding dosage bottles	199,50

Storage

silica gel - orange, 500g

drying pearls for specimen storage in desiccator ¹



	price €
Zub021	31,30

¹ Desiccator for drying or moisture-retaining storage of specimen is available on request (longer delivery time periods possible)

Cleaning / Etching

cleaning cotton wool - 200 g



100% pure cotton wool for specimen cleaning

	price €
Zub009	5,00

cotton wool pads - 280 pieces



	price €
Zub026	6,10

squeeze wash bottle - 1 piece, 500 ml



with bottle cap, high quality polyethylene (LDPE)

	packaging unit (pieces)	price €
DFL007	1	8,40
DFL008	3	20,40

compressed air spray - 1 can, 400 ml



non-contact cleaning of specimen

	price €
Zub022	12,40

etching tongs - 1 piece

secured etching of round specimen, plastic-coated grips surrounding extent of specimen, slipping is prevented



	type	grips for specimen (Ø)	Price EUR
ÄtzZ001	A 45°	25 mm to 30 mm	31,00
ÄtzZ002	B 45°	30 mm to 40 mm	32,00
ÄtzZ005	B 90°	30 mm to 40 mm	34,00
ÄtzZ003	C 45°	50 mm to 70 mm	33,00

etching bowl - 1 piece

plastic, with screw cap, dimensions: Ø 100mm



	high	price €
ÄtzS001	50mm	10,70
ÄtzS002	100mm	18,30

laboratory gloves out of latex - powder free, 100 pieces



	size	price €
Zub028	XL	10,30
Zub004	L	10,30
Zub003	M	10,30
Zub005	S	10,30

laboratory gloves out of nitrile - 100 pieces



	size	price €
Zub027	XL	13,40
Zub016	L	13,40
Zub017	M	13,40
Zub018	S	13,40

Mobile Materialography

CT MobiPol



transportable rechargeable grinding and polishing unit, 1 piece

CT MobiPol offers all possibilities to be used flexibly on-site. It consists of a control unit and a precision-hand piece with a power-micro motor.



With the aid of an etching-pencil the CT MobiPol is able to etch electrolytically. In particular, in case of on-site work, electrolytic etching without alternative for alloyed steels, for example in this case it is not possible to work with heated VZA-Mordant. Etched surface is visible directly - so the progress and completion of the etching process can be controlled well.



advantages are:

- maintenance-free rechargeable battery pack
- small size & low weight
- grinding, polishing and etching - All-In-One

CT MobiPol set

rechargeable battery pack control unit with precision-hand piece IC-300/90° incl. rubber plate Ø 30mm, equipped with micro motor

ENK-250 T and reducing gear RG-01, etching pencil with accessories. For etching, power adapter (to recharge battery pack), shoulder bag and transport case with dividers

MobiPol001	price € on request
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CT MobiPol components

	description	price €
MobiPol002	control unit with precision-hand piece IC-300/90° incl. rubber plate, equipped with micro motor ENK-250 T and reducing gear RG-01, power adapter (to recharge battery pack), shoulder bag and transport case with dividers	on request
MobiPol003	etching pencil incl. connection cable, etching unit and cotton rolls	on request

accessories for our mobile systems ¹

Silicone carbide wet abrasive paper - self-adhesive, 100 pieces

	diameter (Ø)	grain size in µm	grain size (FEPA)	price €
MobMat029	30 mm	196	P80	26,30
MobMat017		125	P125	25,80
MobMat018		65	P240	25,20
MobMat019		46	P320	25,20
MobMat030		35	P400	25,20
MobMat020		30	P500	25,20
MobMat031		25	P600	25,20
MobMat021		22	P800	25,20
MobMat032		18	P1000	25,20
MobMat022		15	P1200	25,20

Polishing cloths - self-adhesive, 25 pieces

	diameter (Ø)	type	application	price €
MobMat014	30 mm	Mol	Polieren mit 3µm oder 6 µm	19,00
MobMat007		Silk	Polieren mit 3 µm	19,00
MobMat006		Nap	Endpolieren mit 1 µm	19,00
MobMat037		Filz	Endpolieren mit 1 µm	19,00

¹ Our Power Lock System for mobile materialography is available on request

Various accessories

	description	packaging unit (pieces)	price €
GOT010	glass slides to fix reprint foil, with 20 mm mat edge for markings, 76 x 76 x 1 mm	50	5,00
MobMat026	transport- and storage box for up to 10 glass slides	1	13,50
MobMat027	transport- and storage box for up to 100 glass slides, stackable, dust proof, with numbering in the base	1	19,00

Reprint foils

Reprint foil - 20 sheets



	measurements	diamond grain size in μm	price €
MobMat016	125 x 125 mm	95 μm	35,50
MobMat036	100 x 150 mm		35,50
MobMat015		30 μm	35,50

Fixing assistance

Reprint foil fixing assistance SFZ

allows planar clamping of reprint foils for microscopy and optimal viewing of microstructures; due to the special reflective surface you can save yourself the costly gold steaming and proceed directly to the microstructures analysis

Reprint foil fixing assistance SFZ - 1 piece / 1 set



	description	price €
SFZ002	\varnothing 25 mm	34,00
SFZ003	\varnothing 30 mm	45,00
SFZ004	\varnothing 40 mm	50,50
SFZ001	set consisting of: 3 reprint foil fixing assistance SFZ in \varnothing : 25mm, 30mm and 40mm: each with 5 replacement foils and 3 rubber bands; in addition: 1 PU (20 sheets) reprint foils 95 μm 100 x 150 mm and 1 PU (20 sheets) reprint foils 30 μm 100 x 150 mm	178,00

Cleaning and etching agents

Etching agents, solvents and rubbing alcohol - 250 ml

small bundles can reliably be transported to facilitate on-site handling

	name	for etching of e.g.	price €
ÄtzM024	Adler etching	chrome-nickel steels, velvet joints	17,90
ÄtzM025	etching agent by Kalling II	Ni-Basislegierungen, hochlegierte Stähle	17,90
ÄtzM026	3% alcoholic nitric acid	nickel-base alloys, high alloyed steels	14,80
ÄtzM042	5% alcoholic nitric acid		16,50
ÄtzM027	acetone	for wetting triacetate foil	12,00
Clean007	rubbing alcohol	ethanol denatured, 99,9%	4,70

Surface reprint mass

Reprint 1000 - blue **Product on sale while stocks last**

- high-viscous mould material made from additional cross-linked vinyl silicones
- especially suitable for the non-destructive analyses of microstructures and three dimensional structures
- shows good hydrophilic qualities which improve wetting ability and mould accuracy
- consists of quick hardening two-component-silicone the print can be dissolved after approx. 3-4 minutes and evaluated immediately



	description	packaging unit (pieces)	price €
MobMat010	50 ml cartouches	1	24,30
MobMat013	mixing pistol 50ml cartouches	1	55,00
MobMat011	mixing spouts	30	20,20
MobMat012	mixing tips	30	24,30
MobMat009	set consists of: 1x mixing pistol, 2x cartouches 50ml, 30x mixing spouts, 30x mixing tips	1	138,00

Reprint 2000 - orange, 1 set

- ductile, additional cross-linked high-precision reprint material on vinyl-poly siloxane base
- particularly well suited to form of larger components contours, fracture surfaces or similar
- from the resulting negative-print you can easily produce a positive by casting a suitable cold embedding agent
- replicas are prepared easily for archiving, examination or other documentation



	description	price €
MobMat028	set consists of: 1x 450 ml basis mass (690g) 1x 450 ml hardening mass (690g)	75,20

Reprint 3000 D - blue, 1 piece

- light-curing, low viscosity reprint mass for surface reprints (such as structure reprints) filled in one syringe
- curing with UV-LED lamp



	description	price €
MobMat033	syringe à 3g incl. 5 x application cannulas	14,00
MobMat035	UV-LED-Lamp with 21 LEDs, with wavelength 395 - 400 nm, incl. batteries	40,00
MobMat034	set consists of: 4x syringes à 3g, 20x application cannulas, 50x glass slides (GOT010), 1x UV-LED-Lamp incl. Batteries, 1x transport- and storage box, black, 235 x 185 x 48 mm with foam insert	114,50

Accessories

Fixing assistance RSP

The fixing assistance RSP allows the planar putty of materialographic specimen without any interference of the prepared surface. Made out of aluminum and set on the metallographic specimen, to have no contact to the embedded specimen. Thus, the prepared specimen can be easily putty plan.

RSP - rings of (anodized) aluminum, different colors, 1 piece



	description	price €
RSP006	All-In-One fixation ring RSP for all specimen sizes Ø 30 mm, Ø 40 mm and Ø 50 mm (silver - not anodized)	40,00

RSP complete set



	description	price €
RSP007	set consists of: 1x grinding press, 1x 5 pieces metal microscope slides (76 x 26 x 2 mm), 1x 1 kg plasticine, 1x All-In-One fixation ring RSP for all specimen sizes Ø 30 mm, Ø 40 mm and Ø 50 mm (silver - not anodized)	359,50

grinding press - 1 piece



planar putty of materialographic specimen

	price €
ZubSP001	279,00

metal microscope slides - 5 pieces



black anodized aluminum, 76 x 26 x 2 mm,

	price €
Zub012	57,00

plasticine - grey, 1 kg



to fix materialographic specimen on metal microscope slides

	price €
Zub011	11,70

cleaning set for microscopes - 1 piece

contains everything you need for an efficient dust control inside your lab



	description	price €
MRS001	set consists of: 1x Anti-static Microfiber Cloth 450 x 250 mm, 1x Precision Cleaning Fluid (29 ml pump spray bottle), 1x Anti-Static Brush, 1x SpeckGRABBER SG, 1x Cleaning Swabs for using the PLC cleaning solution	39,00

Josef-Papier - 1.000 sheets



protection-paper for materialographic cuts

	price €
Zub019	17,00

protective lacquer - 400 ml



for spraying onto ready-prepared materialographic specimen, easy analysis by microscopy, removable with acetone

	price €
Lac001	28,10

glass slides

glass slides - 76 x 26 mm, 50 pieces



	type	description	price €
GOT011	OT	cut edges, clear, without matt strip	3,00
GOT010	OTG	ground edges, clear, with matt strip	5,00

glass slides - 48 x 28 mm, 1,5 - 1,6 mm, 50 pieces

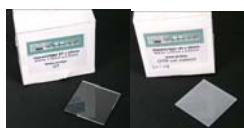
glass slides with dimensions 48 x 28 mm, known as „Gießener Format“, are traditionally used for thin section preparation. Today's mainly mechanical production places enormous demands on the glass slides:

- low-stress glass to prevent glass breakage
- glass thickness > 1,5mm to prevent glass breakage also
- constant thickness of the glass slide with low tolerances ($\pm 0,05$ mm) for low removal (time and costs) during surface grinding
- ground edges (90°) to prevent injuries and edge cracks



	type	description	price €
GOT001	OT	cut edges, clear	14,60 ¹
GOT002	OTM	cut edges, one side frosted	21,10 ¹
GOT003	OTG	ground edges, clear	22,10 ¹
GOT004	OTGM	ground edges, one side frosted	26,80 ¹

glass slides - 50 x 50 mm, 1,5 - 1,6 mm, 50 pieces



	type	description	price €
GOT005	OT	cut edges, clear	16,20 ²
GOT008	OTM	cut edges, one side frosted	21,50 ²
GOT006	OTG	ground edges, clear	22,20 ²

glass slides - 75 x 100 mm, 1,5 - 1,6 mm, 50 pieces



	type	description	price €
GOT007	OT	cut edges, clear	37,00 ²

cover glasses - 100 pieces



		dimensions	price €
GOTDG004		18 x 18 mm	2,50
GOTDG003		24 x 24 mm	4,00
GOTDG001		24 x 40 mm	5,00 ¹
GOTDG005		24 x 50 mm	7,00

accessories

thin section holder - for clamping into the cutting machine, with two universal clamping jaws and holder, 1 piece



	price €
ZubDS004	201,00

marking pen - 1 piece for marking of glass slides with matt strip



	price €
ZubDS006	5,00

¹ quantity discount per item: for orders from 10 PU 10%, from 20 PU 15%, from 30 PU 20%, from 40 PU 25%

² quantity discount per item: for orders from 5 PU 5%, from 10 PU 10%, from 15 PU 15%

diamond pen - 1 piece

for marking of glass slides **without** matt strip



ZubDS001

price €
105,00

adhesive- 20 ml, 1 piece for fixing specimen on slides



ZubDS002

price €
20,10

CT Crystalbond 509 - 100g, 1 can

thermoplastic polymer with very good adhesive properties, 100 g

This adhesive is used for temporary attachment of sensitive crystals, metallographic preparations, glass or ceramic parts, used in crushing, cutting, grinding or polishing. Crystalbond™ sticks to metal, glass and ceramic surfaces, melting at 85 ° to 110 ° C



ZubDS016

price €
40,00

storage box - for slides 48 x 28 mm - wooden, 1 piece



Zub013

description

price €

for 50 slides

21,00

Zub014

for 100 slides

30,00

standard slide box - for slides 76 x 26 mm



ZubDS010

description

packaging unit

price €

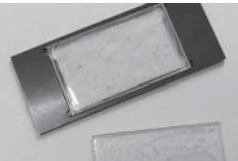
carton, for 100 slides

1 piece

39,00

slide holder - 1 piece

adapter for slides for 48 x 28 mm to 76 x 26 mm



ZubDS005

price €
59,00

cleaning cloths - for sensitive surfaces, low linting, 100 sheets



ZubDS012

price €
32,00

compressed air spray - for non-contact cleaning of objects, 200 ml



ZubDS013

price €
15,00

weights - 2 pieces each 50 g for pressing the cover glasses onto glass slides



ZubDS008

price €
32,00

Einbettparameter zu den Warmeinbettmitteln *parameters of warm embedding materials*

Ø	Einbettmittel <i>embedding material</i>		Zeit <i>time</i>	
	Produkt <i>product</i>	Menge <i>quantity</i>		
		[Löffel] ¹ <i>[scoop] 1</i>	[ml]	
25 mm	WEM EPOXY	1	15	3 - 5
	WEM KLAR	1	15	3,5 - 5
	WEM UNI	1	15	3,5 - 5
	WEM REM	1	15	4 - 5
	WEM Phenol	1,5	23	3,5 - 5
	WEM WiDa	1	15	3 - 5
	WEM BIO PLUS	1	15	4 - 5
	WEM BIO FILL	1,5	23	4 - 5
	WEM FAST Orange	1	15	3 - 5
	WEM FAST Blue	1	15	3 - 5
30 mm	WEM EPOXY	1,5	23	4 - 6
	WEM KLAR	1,5	23	4 - 6
	WEM UNI	1,5	23	4 - 6
	WEM REM	1,5	23	4 - 6
	WEM Phenol	2	30	4 - 6
	WEM WiDa	1,5	23	4 - 6
	WEM BIO PLUS	1,5	23	4 - 5
	WEM BIO FILL	2	30	5 - 7
	WEM FAST Orange	1,5	23	4 - 6
	WEM FAST Blue	1,5	23	4 - 6
40 mm	WEM EPOXY	3	45	5 - 7
	WEM Klar	2	30	4,5 - 7
	WEM UNI	3	45	4,5 - 7
	WEM REM	2,5	38	5,5 - 7
	WEM Phenol	3	45	5 - 7
	WEM WiDa	3	45	5 - 7
	WEM BIO Plus	2,5	38	4 - 5
	WEM BIO Fill	3	45	5 - 7
	WEM FAST Orange	3	45	5 - 7
	WEM FAST Blue	3	45	5 - 7
50 mm	WEM EPOXY	5	75	6 - 8
	WEM Klar	3	45	6 - 8
	WEM UNI	4	60	6 - 8
	WEM REM	4	60	6 - 8
	WEM Phenol	5	75	7 - 9
	WEM WiDa	5	75	6 - 8
	WEM BIO Plus	4	60	6 - 8
	WEM BIO Fill	5	75	7 - 9
	WEM FAST Orange	5	75	6 - 8
	WEM FAST Blue	5	75	6 - 8

¹ à 15 ml

Heizen
heating

Kühlen
cooling

Temperatur
temperature

Kraft
strength

Zeit
time

Geschwindigkeit
speed

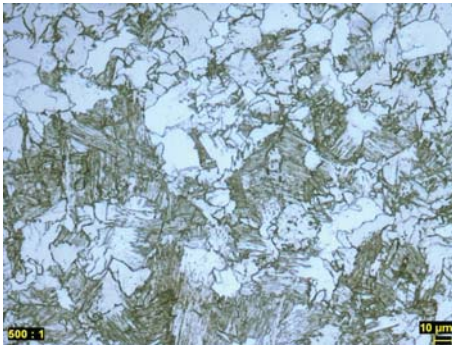
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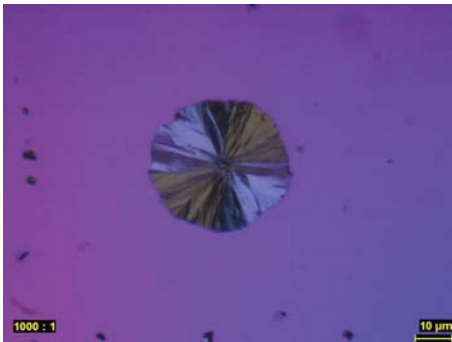
[min]

150 - 180	15	2 - 3	schnell <i>fast</i>
150 - 180	15	6 - 8	langsam <i>slow</i>
150 - 180	15	6 - 8	langsam <i>slow</i>
150 - 180	15	2 - 3	schnell <i>fast</i>
150 - 180	15	2 - 3	schnell <i>fast</i>
150 - 180	15	2 - 3	schnell <i>fast</i>
120 - 170	15	2 - 5	schnell <i>fast</i>
170 - 190	15	2 - 5	schnell <i>fast</i>
180 - 190	15	2 - 3	schnell <i>fast</i>
180 - 190	15	2 - 3	schnell <i>fast</i>
150 - 180	20	2 - 3	schnell <i>fast</i>
150 - 180	20	6 - 8	langsam <i>slow</i>
150 - 180	20	6 - 8	langsam <i>slow</i>
150 - 180	20	2 - 3	schnell <i>fast</i>
150 - 180	20	2 - 3	schnell <i>fast</i>
150 - 180	20	2 - 3	schnell <i>fast</i>
120 - 170	20	3 - 5	schnell <i>fast</i>
170 - 190	20	3 - 5	schnell <i>fast</i>
180 - 190	20	2 - 3	schnell <i>fast</i>
180 - 190	20	2 - 3	schnell <i>fast</i>
150 - 180	30	2 - 4	schnell <i>fast</i>
150 - 180	30	7 - 10	langsam <i>slow</i>
150 - 180	30	7 - 10	langsam <i>slow</i>
150 - 180	30	2 - 4	schnell <i>fast</i>
150 - 180	30	2 - 4	schnell <i>fast</i>
150 - 180	30	2 - 4	schnell <i>fast</i>
120 - 170	30	3 - 5	schnell <i>fast</i>
170 - 190	30	3 - 5	schnell <i>fast</i>
180 - 190	30	2 - 4	schnell <i>fast</i>
180 - 190	30	2 - 4	schnell <i>fast</i>
150 - 180	50	2 - 4	schnell <i>fast</i>
150 - 180	50	9 - 12	langsam <i>slow</i>
150 - 180	50	9 - 12	langsam <i>slow</i>
150 - 180	50	2 - 4	schnell <i>fast</i>
150 - 180	50	2 - 4	schnell <i>fast</i>
105 - 180	50	2 - 4	schnell <i>fast</i>
120 - 170	50	3 - 6	schnell <i>fast</i>
170 - 190	50	3 - 6	schnell <i>fast</i>
180 - 190	50	2 - 4	schnell <i>fast</i>
180 - 190	50	2 - 4	schnell <i>fast</i>

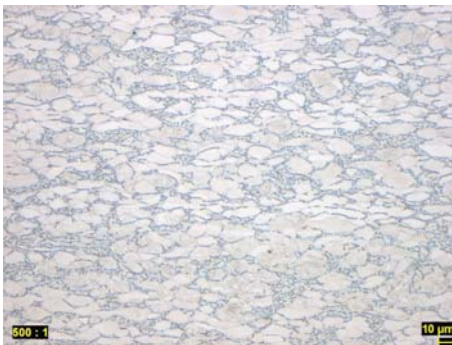
Preparation examples from practice



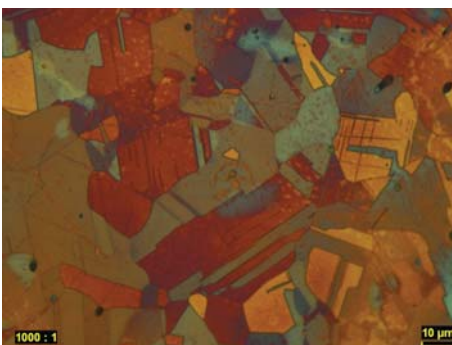
preparation recommendation: general steel qualities						
cutting	Cut 023 (reinforced)		(alternative: Cut 029)			
embedding	WEM Epoxy und WEM Phenol		(alternative: WEM UNII)			
grinding and polishing	single pressure					
	Grinding 1	Grinding 2	Grinding 3	Polishing 1	Polishing 2	Polishing 3
base	DiaGrit 120	GriFin 9		SPT Silk	SPT Nap	
G/P- agent	Diamant	Dia- Susp. M		Dia- Susp. M	Dia- Susp. M	
grain size	120 µm	9 µm		3 µm	1 µm	
lubricant	Water	Green		Green	Green	
revolutions	300 rpm	150 rpm		150 rpm	150 rpm	
pressure/N	30	30		30	20	
time/minutes	until it's flat	2 - 3		2 - 3	1 - 2	



preparation recommendation: gray cast iron						
cutting	Cut 023 reinforced)		(alternative: Cut 029)			
embedding	WEM Epoxy und WEM Phenol		(alternative: CEM 1000 Blue)			
grinding and polishing	single pressure					
	Grinding 1	Grinding 2	Grinding 3	Polishing 1	Polishing 2	Polishing 3
base	DiaGrit 120	GriFin 9		SPT Silk	SPT Nap	
G/P- agent	Diamant	Dia- Susp. M		Dia- Susp. M	Dia- Susp. M	
grain size	120 µm	9 µm		3 µm	1 µm	
lubricant	Water	Green		Green	Green	
revolutions	300 rpm	150 rpm		150 rpm	150 rpm	
pressure/N	30	30		30	20	
time/minutes	until it's flat	2 - 3		3 - 4	1 - 2	

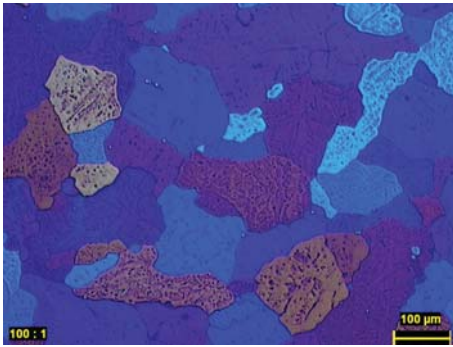


preparation recommendation: Titanium and titanium alloys						
cutting	Cut 057					
embedding	WEM Epoxy und WEM Phenol		(alternative: CEM3000 TWINFIX)			
grinding and polishing	single pressure					
	Grinding 1	Grinding 2	Grinding 3	Polishing 1	Polishing 2	
base	SiC-Papier	SiC-Papier	SiC-Papier	SPT Super Plan Perf.	SPT Chem	
G/P-agent	SiC	SiC	SiC	Dia- Susp. P	Silica Susp. ¹	
grain-size	P120/120 µm	P320/46 µm	P600/25 µm	9 µm	50 nm	
lubricant	Water	Water	Water	Green	-	
revolutions	300 rpm	300 rpm	300 rpm	150 rpm	150 rpm	
pressure/N	30	30	30	25 - 30	15	
time/minutes	until it's flat	1 - 2	1 - 2	3 - 5	6 - 8	

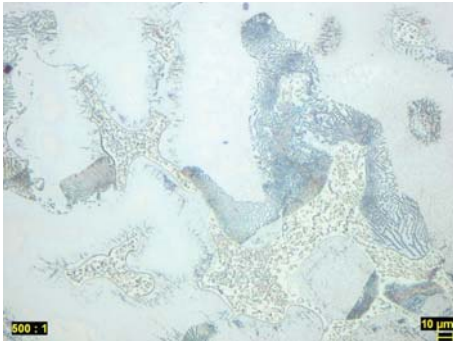


preparation recommendation: copper and copper alloys						
cutting	Cut 057		(alternative: Cut 023)			
embedding	Epoxy 2000		(alternative: CEM1000 Blue)			
grinding and polishing	single pressure					
	Grinding 1	Grinding 2	Grinding 3	Polishing 1	Polishing 2	Polishing 3
base	SiC-Papier	SiC-Papier		SPT Silk	SPT Chem	
G/P - agent	SiC	SiC		Dia- Susp. M	Silica Susp. ²	
Grain-size	P320/46 µm	P600/25 µm		3 µm	50 nm	
lubricant	Water	Water		Green	-	
revolutions	300 rpm	300 rpm		150 rpm	150 rpm	
pressure/N	30	30		30	15	
time/minutes	until it's flat	1 - 2		2 - 3	1 - 2	

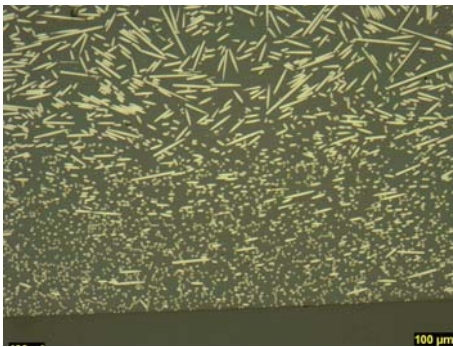
¹ final polishing with 100 ml silica suspension 50 nm and 20 ml hydrogen peroxide



preparation recommendation: aluminium and aluminium alloys						
cutting	Cut 040		(alternative: Cut 023)			
embedding	CEM3000 TWINFIX		(alternative: CEM1000 Blue)			
grinding and polishing	single pressure					
	Grinding 1	Grinding 2	Grinding 3	Polishing 1	Polishing 2	Polishing 3
base	SiC-Papier	SiC-Papier		GriFin Soft 9	SPT Silk	SPT Chem
G/P-agent	SiC	SiC		DiaTwin Max M	DiaTwin Max M	Silica-Susp.
grain size	P120/120 μm	P320/46 μm		9 μm	3 μm	50 nm
lubricant	Water	Water		-	-	-
revolutions	300 rpm	300 rpm		150 rpm	150 rpm	150 rpm
pressure/N	30	30		25 - 30	30	15
time/minutes	until it's flat	1 - 2		3 - 5	2 - 3	1 - 2



preparation recommendation: magnesium and magnesium alloys						
cutting	Cut 040		(alternative: Cut 023)			
embedding	Epoxy 1000		(alternative: CEM1000 Blue)			
grinding and polishing	single pressure					
	Grinding 1	Grinding 2	Polishing 1	Polishing 2	Polishing 3	Polishing 4
base	SiC-Papier	SiC-Papier	GriFin Soft 9	SPT Silk	SPT Nap	STP Chem
G/P-agent	SiC	SiC	DiaTwin WF	DiaTwin WF	DiaTwin WF	Silica-Susp. WF
grain size	P320/46 μm	P600/25 μm	9 μm	3 μm	1 μm	200 nm
lubricant	Water	Water	-	-	-	-
revolutions	300 rpm	300 rpm	150 rpm	150 rpm	150 rpm	150 rpm
pressure/N	30	30	25 - 30	25	20	15
time/minutes	until it's flat	1 - 2	3 - 5	2 - 3	1 - 2	1 - 2



preparation recommendation: carbon fiber or glass fiber coatings						
cutting	Cut 057		(alternative: DiaCut 014)			
embedding	Epoxy 2000		(alternative: CEM3000 TWINFIX)			
grinding and polishing	single pressure					
	Grinding 1	Grinding 2	Grinding 3	Grinding 4	Polishing 1	Polishing 2
base	SiC-Papier	SiC-Papier	SiC-Papier	SiC-Papier	SPT Seda	SPT Chem
G/P-agent	SiC	SiC	SiC	SiC	Dia- Susp. P	Silica-Susp.
grain size	P320/46 μm	P1000/18 μm	P2500/10 μm	P4000/5 μm	1 μm	50 nm
lubricant	Water	Water	Water	Water	Green	-
revolutions	300 rpm	300 rpm	300 rpm	300 rpm	150 rpm	150 rpm
pressure/N	25	25	25	25	20	15
time/minutes	until it's flat	1 - 2	1 - 2	1 - 2	1 - 2	1 - 2



preparation recommendation: electronic modules						
cutting	PCut 012		(alternative: DiaCut 014)			
embedding	Epoxy 2000		(alternative: CEM3020)			
grinding and polishing	single pressure					
	Grinding 1	Grinding 2	Grinding 3	Polishing 1	Polishing 2	Polishing 3
base	SiC-Papier	SiC-Papier		SPT Silk	SPT Chem	
G/P-agent	SiC	SiC		Dia-Susp. P	Silica-Susp. ²	
grain size	P320/46 μm	P600/25 μm		3 μm	50 nm	
lubricant	Wasser	Wasser		Green	-	
revolutions	300 rpm	300 rpm		150 rpm	150 rpm	
pressure/N	30	30		30	15	
time/minutes	until it's flat	1 - 2		2 - 3	1 - 2	

² it is possible to add ammonia solution (1 ml) and hydrogen peroxide (1 ml) to the final polishing (100 ml)



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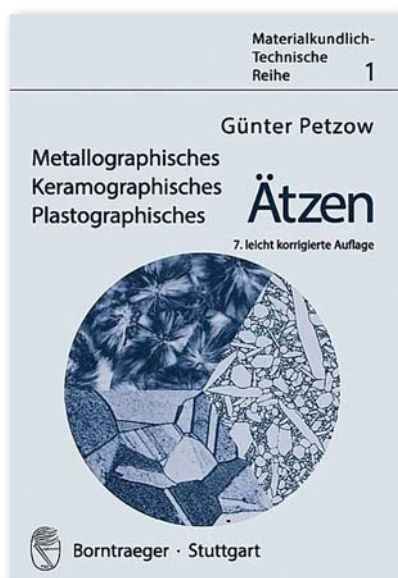
Language: german

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