

Test Inks

for testing surface tension



Test Inks since 1976

arcotest GmbH is a manufacturer of test inks

arcotest GmbH is a manufacturer of test inks for measuring surface tension or surface energy on a wide variety of plastic, glass, ceramic and metal surfaces.

The company was founded in 2003 as an independent company and was integrated with arcotec GmbH.

A spin-off of Fritz Bloss Industrievertretungen, itself founded in 1976, arcotec GmbH was established in 1980 as a manufacturer of corona, plasma or flame pre-treatment devices.

To optimise the assessment of pre-treatment results, the test inks developed for that purpose were used.

These blue-tinted test inks were manufactured according to DIN 53364/ISO 8296 and must still be labelled as toxic.

To respond to market demands for non-toxic inks, such ink mixtures have been produced since 1980.

Although various inks from other manufacturers are called non-toxic today, it is important to note that this does not mean that they are non-hazardous, particularly if customers assume this because there is no corresponding labelling.

In 2020, the new, non-harmful test ink arcotest ORGANIC/BIO was developed, recognisable by its green dye and product body.

Today, arcotest GmbH is very well known among specialists and in many sections of the industry for its products in determining surface tension / surface energy with the help of test inks.

Test inks can be used to determine the surface tension (ST) / surface energy (SE) of solids made of plastic, glass, ceramic or metal. The wetting pattern is used in particular to identify the surfaces' adhesive ability for printing, bonding and painting.

The surface tension is determined by applying a line of ink measuring just a few centimeters in length to the surfaces to be evaluated and observing the behaviour of this ink line. If the line contracts within 2 or 4 seconds—depending on the ink specification—the surface tension of the test area is lower than that of the test ink. Conversely, if the line spreads, this would show that the surface tension of the applied ink is lower than that of the surface. If the line remains unchanged during the observation period, the value of the surface tension has been reached exactly or is slightly higher.

The same inks can be used **for all measurements**, whether on metal, plastic or other materials. They can be used for both production and laboratories.

Alternatively, **contact angle measuring devices** are mainly only used in laboratories as the measurements are time consuming and need an expert to operate them.

Test inks are mixtures of chemical substances that can be graduated and therefore have a large detection range, i.e. 18 to 105mN/m (Dyn/cm), to evaluate the surfaces.

To use a simple example, there are water-repellent surfaces (pearl formation) and those that allow the absorption and sheeting out of water (73mN/m) and there are all the states in between them, where good adhesion values above 38mN/m are to be expected, depending on the properties of the printing ink, adhesive or paint.

In the metal industry, surfaces may be contaminated with oil to a greater or lesser extent depending on the production process. Cleaning is required, and the result of the cleaning process needs to be determined quickly and accurately bearing in mind that this contamination is not always distributed evenly over the surfaces.

Plastics, whether produced as foils or in an injection moulding process as moulded parts, do not tend to have any contaminated surfaces. They are treated physically or chemically for printing, painting and bonding depending on the material, especially polyolefins, in order to bring the surface tension to the required values.

The test inks are supplied in bottles of 10 millimeters or more or in the shape of a pen and are available from stock.

Customer enquiries are promptly answered by an application technology department and sample testing is also possible.

The shelf life of the test inks is not subject to any special conditions. Generally, it is 6 months. The usability is generally only limited by contamination that may accidentally be removed from the surfaces. This effect can be eliminated as far as possible by using disposable cotton-tipped applicators.



Good wetting

Bad wetting

General information

Clean, solid bodies have a surface tension / specific surface energy , which decreases during periods of storage. In many technical processes, such as bonding, painting and printing, surface tension plays an important role and is crucial for determining adhesive bond and wettability.

Surface tension is measured in mN/m and dyne/cm. It is shown with test inks according to DIN 53364/ISO 8296 or other compositions. When compared to liquids, a solid body’s surface energy can only be determined indirectly from the contact angle when a test liquid with a particular surface tension is applied to a sold body.

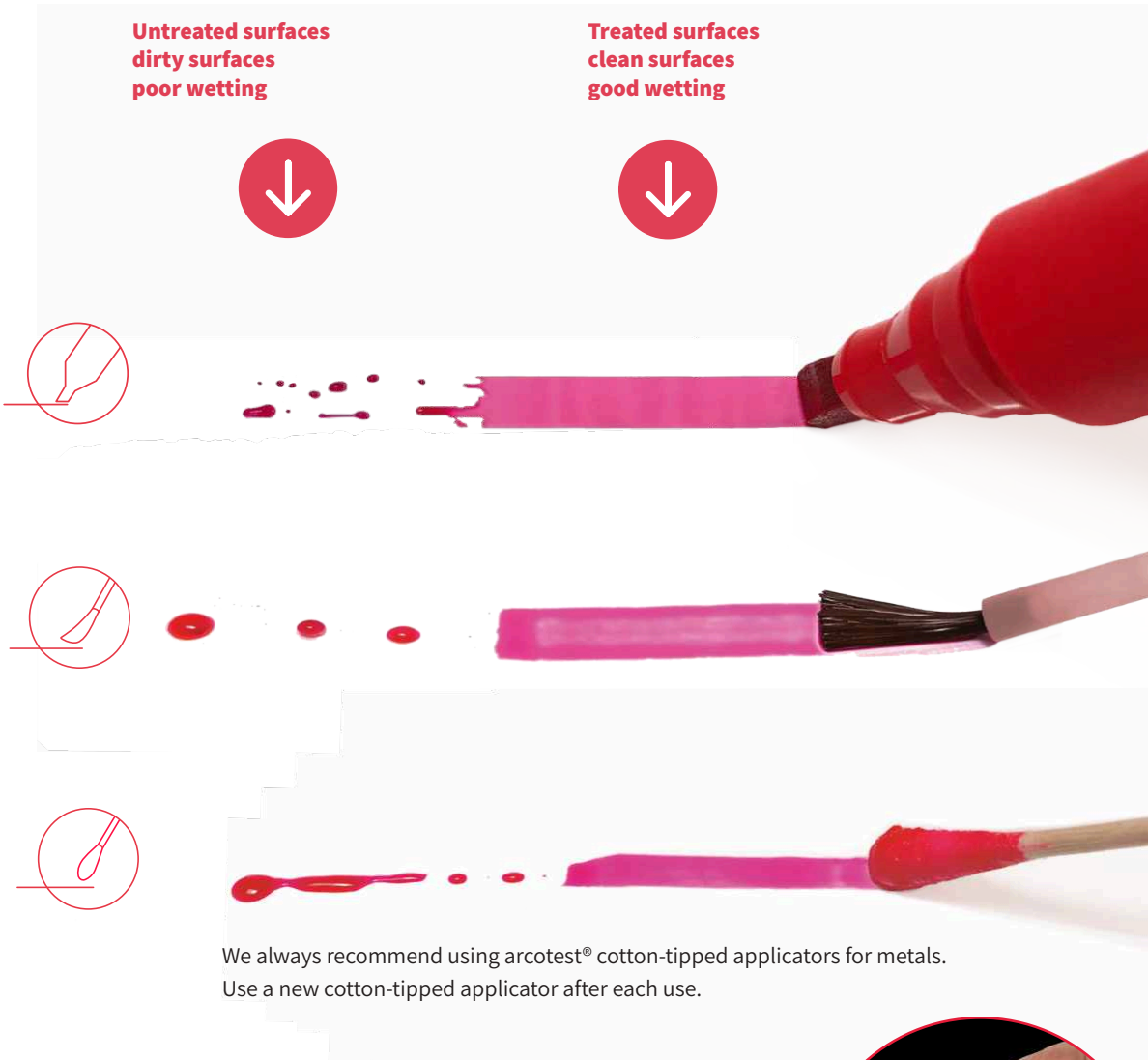
Applications of test inks / test pens

- Metals:**

 - Assessing surface cleanliness.
 - Assessing the suitability of cleaning fluids.
- Plastics:**

 - Determining the activation energy for further processing (e.g. for printing, bonding, painting, wetting).

Material	Metal / plastics / ceramic ... etc.
Surface impurities	Oils, dust, antistatic agents, lubricants, release agents, fingerprints
Surface cleaning / treatment	Plastics: with water / solvents / pre-treatment Metals: corona / plasma / physical pre-treatment (assuming preliminary cleaning of the surface)
Surface tension (untreated surface)	Metals: 25–35mN/m Plastics: < 38mN/m or higher
Surface tension (treated surface)	38mN/m or more (minimum value for cleanliness) 44mN/m or more (target value for further processing) As metal surfaces develop an oxide layer when exposed to air, the natural surface tension of metals (> 100mN/m) cannot be achieved simply by cleaning. Optimum cleaning results using arcotestCLEANER.



Measuring surface tension

of solid bodies using test ink / pens

	Application	Further information
Measuring means	Ink/pens arcotest® ORGANIC: 30–46mN/m, (non-toxic, non-harmful, non-hazardous according to the CLP Regulation (EC) No. 1272/2008) arcotest® PINK: 22–60mN/m, (non-poisonous) arcotest® BLUE: 18–105mN/m, (toxic 24–57mN/m) acc. to DIN ISO 8296 and ASTM D 2578-99a	Values established using different measurements (inks/pens/cotton-tipped applicators) or test ink series are not be comparable to the required level of accuracy. Please use only one type of ink (colour)!
Measuring temperature of environment and solid body	20°C +/- 3°C	If the temperature changes by +/- 10°C, the surface tension changes by +/- 1mN/m.
Condition of the solid body to be tested	Surfaces should not be touched with bare hands.	Fingerprints may reduce the surface tension. (Wear gloves)

Application	Ink: Dip brush or cotton-tipped applicator into the test ink and wipe off excess off on the bottle neck. Ink/pens: With a little pressure, apply approx. 40mm without touching the ink trace of previous applications. Make sure you apply the ink in an even, continuous line. Use arcotest® cotton-tipped applicators only once.	Use arcotest® cotton-tipped applicators on untreated metal. Commercial cotton buds are not recommended as they contain cosmetic oils and glues. When using cotton-tipped applicators, ensure even application, i.e. do not apply too much ink to avoid minimal differences in the values shown (thick application amounts may show a slightly higher (1mN/m) value than thinner ones).
Observation period (after ink application)	arcotest® ORGANIC: 30 to 46mN/m 2 seconds arcotest® BLUE: 18 to 105mN/m 2 seconds arcotest® PINK: 22 to 26mN/m 2 seconds 28 to 44mN/m 4 seconds 45 to 60mN/m 2 seconds	If the edges of the ink line applied by a cotton swab or pen contract within 2 or 4 seconds per guidelines referenced to the left, then repeat the test using the next lower value. If the edges run or sheet out, then repeat the test with the next higher value. If the edges run, repeat the measurement with the next-highest value. The surface tension is achieved when the line remains straight for 2 or 4 seconds, depending on ink specification.
Result	1. Homogenous, even line 2. Bubbles form (poor / no wetting) 3. Ink runs or sheets out	1. The surface tension has reached or slightly exceeded the set value indicated on the bottle. 2. Not clean; repeat cleaning or pre-treat. Surface tension is lower than ink value. 3. Surface tension is higher than ink value
Shelf life	6 months from opening the ink/pens. Unopened shelf life is 1 year.	Individual components of the test inks evaporate at different rates. Close bottles and pens tightly after use.
Usability	This depends on how the ink is used. If contamination enters the bottles or markers, check if it affects the measuring values.	

Surface tension of solid bodies

If surfaces are tested for their surface tensions, the values can always change towards lower values. There are various influencing factors, especially in the plastics sector, where a reduction in surface tension occurs for surfaces that have been activated. This can take days to several weeks for these changes to occur, depending on various factors such as temperatures and additives.	Before further processing at the customer's site, the surface tension values should be compared with those recommended by the test pen and ink manufacturer, Arcotest GmbH, or their distributors. If needed, surface tension values can be increased using physial methods such as corona, flame, or plasma treatments. Repeating the cleaning process with washing and drying is generally not effective, especially since physical treatments can significantly increase surface tension values, which repeated cleaning cannot achieve.
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Influencing factors are:

- chemical structure of the material
 - duration of storage period, if the materials are lying, whether uncleaned, cleaned or activated
- temperature changes during storage
 - possibilities of contamination during storage
 - oxidation of metal surfaces over time
 - transport conditions of the material from the manufacturer to the customer

Material reference values of natural surface tension

Materials	Abbreviation	mN/m at 20 °C
Plastics		
Polyethylene	PE	32
Polypropylene	PP	30
Polyolefins (polyethylene, polypropylene, polybutylene / polybutene)	PE, PP, PB	30
Polyvinyl chloride	PVC	40
Polystyrene	PS	38
Polyurethane	PUR	37
Polyethylene terephthalate	PET	44
Polybutadiene	PU	45
Polytetrafluorethylene	PTFE	21
Polyacrylonitrile PAN	PAN	46
Polyether sulfone	PES	47
Polycarbonate	PC	42
Phenol formaldehyde resin	PF	42
Silicone		22
Epoxy resins		45
Aluminium foil		41
Glass		73
Steel		43-46
Reference value of surface tension for material cleanliness (metal, glass, ceramics, etc.)		38+

Test Inks ORGANIC

- Non-toxic
- Not harmful to health
- Not subject to labelling
- Not harmful to the environment



arcotest® ORGANIC Test Inks are special testing liquids in ranges of defined surface tension – in green colour. They were developed to obtain non-toxic test inks that do not require labelling. The application and handling of arcotest® ORGANIC is based on DIN 53364/ISO 8296.

ORGANIC Test Inks are label-free according to the Ordinance on Hazardous Substances (EU) No. 1272/2008 (CLP).

The ORGANIC Test Inks are available in bottles or in pens from 30 to 46 mN/m (Dyn/cm).

arcoweb®

Disposable cloth

- 38 mN/m
- with accuracy +/- 1,0 mN/m
- observation time : 2 seconds
- application width : 25 mm



38 mN/m

Test Pens ORGANIC

- from 30 to 46 mN/m
- with accuracy +/- 1.0 mN/m
- observation time : 2 seconds
- simple handling
- available in sets of 4, 6, and 8 or as single pens, 5 ml



30 - 46 mN/m

Test Pens ORGANIC Jumbo

- from 30 to 46 mN/m in steps of 2
- with accuracy +/- 1.0 mN/m
- observation time : 2 seconds
- line width 15 mm
- optimal for testing large areas
- available in sets of 4, 6, and 8 or as single pens, 17 ml



30 - 46 mN/m

Test Inks ORGANIC in bottles

- from 30 to 46 mN/m
- with accuracy +/- 0.5 mN/m
- observation time : 2 seconds
- available in bottles of 10, 100 or 250 ml or in sets of 7 bottles of 10 ml



30 - 46 mN/m

Test Inks PINK

The Pink Test Inks are special testing liquids in ranges of defined surface tension. They were developed to get “non toxic” Test Inks. These pink Test Inks are meant to substitute the blue coloured inks as they were declared to be toxic according to DIN 53364 / ISO 8296. The Pink Test Inks are available in bottles or in pens.



Test Pens PINK

- 22 to 60 mN/m
- with accuracy +/- 1.0 mN/m
- observation time:
22 to 26 mN/m: 2 sec.
28 to 44 mN/m: 4 sec.
45 to 60 mN/m: 2 sec.
- simple handling
- available in sets of 4, 6, and 8 or as single pens, 5 ml



Test Pens PINK Jumbo

- 30 to 50 mN/m
- with accuracy +/- 1.0 mN/m
- observation time:
30 to 44 mN/m: 4 sec.
46 to 50 mN/m: 2 sec.
- line width 15 mm
- optimal for testing large film areas
- available in sets of 4, 6, and 8 or as single pens, 17 ml



Test Inks PINK in bottles

- 22 to 60 mN/m
- with accuracy +/- 0.5 mN/m
- observation time:
22 to 26 mN/m: 2 sec.
28 to 44 mN/m: 4 sec.
45 to 60 mN/m: 2 sec.
- available in bottles of 10, 100 or 250 ml or in sets of 7 bottles of 10 ml



Test Inks BLUE

The Blue Test Inks are special testing liquids in ranges of defined surface tension (from 30 to 72mN/m in accordance with ISO 8296 / ASTM 2578 / DIN 53364). The surface tension of a substrate is checked by simply applying the Test Ink to the surface. The Blue Test Inks are available in a range from 18.4 to 105 mN/m.

Available in bottles or in pen form (28 to 72 mN/m).

Colourless: 18, 76, 84, 90, 105 mN/m.

Toxic from 24 to 57 mN/m.

Test Pens BLUE

- from 28 – 60 mN/min steps of one by one
- from 62 – 72 mN/m in steps of two by two
- with accuracy +/- 1.0 mN/m
- observation time is 2 sec.
- simple handling
- no spilling
- available in sets of 4, 6, and 8 or as single pens, 5 ml



Test Inks BLUE in bottles

- 18.4 to 105 mN/m
- with accuracy +/- 0.5 mN/m
- observation time is 2 sec.
- available in bottles of 10, 100 or 250 ml or in sets of 7 bottles of 10 ml



Quicktest 38®/ RAPIDTEST 38® serves to check if the treatment of polyolefins (polypropylene, polyethylene, polybutylene) has shown an effect. A stroke of the pen leaves a full line on the material if the material's surface tension has a value of 38 mN/m or more. If the material's surface tension is below 38 mN/m, the fluid contained in the pen will form small drops on the surface. The line applied with QUICKTEST 38® or RAPIDTEST 38® will dry within seconds and does not need to be wiped off.

RAPIDTEST 38®

- not harmful to the environment
- does not cause eye damage
- not harmful to health



RAPIDTEST 38®

Stroke width: 5 mm
Content: 5 ml
art. no. 40.66100.0

- Easy to handle
- Perfect for quick checks on polyolefins
- Smudge-proof and waterproof
- Colour-intensive, low-odour ink
- The permanent display of the test result can be stored for quality assurance purposes

QUICKTEST 38®

- good readability due to striking red colour

Stroke width: 5 mm
Content: 5 ml
art. no. 40.55100.0



ATTENTION:

The test fluid of QUICKTEST 38®/ RAPITEST 38® contains solvent. This may attack solvent-sensitive materials (e.g. PS) and lead to the erroneous interpretation of test results!

Ideal for testing
large film surfaces



RAPIDTEST 38® JUMBO

Stroke width: 15 mm
Content: 15 ml
art. no. 40.66100.4



RAPIDTEST 38® Jumbo refillable

Stroke width: 30 mm
Content: 20 ml
art. no. 40.66100.

RAPIDTEST 38® refill ink

Content: 22 ml
art. no. 40.66200.0



QUICKTEST 38® Jumbo

- better color presentation
- optimal for testing large film areas

Stroke width: 15 mm
Content: 15 ml
art. no. 40.55100.4



Test pens should not be used if the surface is contaminated, as the residual contamination from the test surface can remain in the felt of the pens and falsify later values.

For contaminated surfaces, use arcotest® test ink in bottles with arcotest® cotton swabs. Not suitable for metal surfaces.

arcotestCLEANER

is a solution based on ethyl alcohol. It serves to improve cleanliness on various surfaces such as metals, glass and plastics. With arcotestCLEANER, tested parts can also be reused by wiping off the test ink. Given the different composition of surfaces, a suitability test should be carried out before each application.

- better cleanliness through surface cleaning
- solvent system based on ethyl alcohol
- no unpleasant odour
- dries very quickly
- can clean and possibly increase adhesive strength
- simple removal of the applied test ink in one single step
- available in 250 ml aluminium bottles



Cotton Tipped Applicators

for testing inks

approved, 100 pcs., 15 cm long

- ideal for handling ink from 100 ml and 250 ml glass bottles
- suitable for single use when the surface is dirty



Test Light

for improved visibility in case of low contrast between measuring surface and test ink, e.g. dark plastic / dark ink.
7 cm long



arcoweb®

38 mN/m • 38 dyne/cm

Surface tension test with arcoweb®

Test inks can be used to determine the surface tension of plastic, metal, glass and other solid bodies. They can identify the cleanliness and adhesive strength of the surfaces to be coated. The measuring value is given in dyne/cm (or mN/m). Results above 38 dyne/cm can be seen as useable.



art. no. 40.20438.0

25 mm, ca. 1 inch



arcoweb®
has an application width of 25 mm.
The application amount is consistently low.

arcoweb®'s tissues are intended for single use. They are sealed into a paper/aluminium/composite packaging. Thanks to the smaller amount of ink, they cannot run. Handling is such that no ink is spilled and your hands are not coloured by the green ink. The included test ink is non-hazardous according to the CLP Regulation (EC) No. 1272/2008, non-toxic and non-harmful.

ORGANIC / BIO

38 mN/m • 38 dyne/cm

Application width: ca. 25 mm

Accuracy: +/- 1 mN/m

Observation time: 2 seconds

Available in individual packages

Packaging size 60 × 80 × 6mm (2.4 x 3 x 0.2 inches)

Benefits:

- ideal for large surfaces
- consistently small application volume
- no spilling
- easy handling
- non-toxic
- non-harmful
- cost-efficient

Scope of application:

- Construction (welding of steel girders or on mineral surfaces)
- any large solid bodies

arcospray 38®

38 mN/m • 38 dyne/cm

The **arcospray 38®** test ink is a testing liquid with a surface tension of 38 mN/m. It has been designed to quickly detect whether the surface is grease-free or not, as values equal or greater than 38 dyne/cm are free of most residual oils. You can use thermal radiation—infrared—to remove **arcospray 38®** without residue, allowing the tested parts to be further processed. **arcospray 38®** allows you to quickly and easily inspect both large and small surfaces, such as chain links.



art. No. 40.80238.0
UFI-Code: QA47-HK5E-6S3Q-G62J

Surface tension value met



The surface tension is determined by spraying test ink onto the surfaces to be assessed.

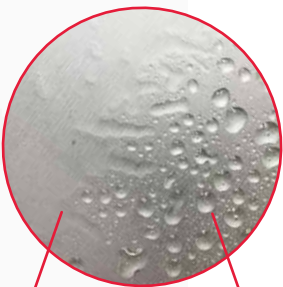
Application:

- Hold the spray bottle at a distance of approx. 15 cm to the test surface
- Spray 2 to 4 times

Result:

If the test ink contracts, the test surface tension is smaller than 38 mN/m.

If the applied test ink remains unchanged, the surface tension value is 38 mN/m or slightly greater.



Surface tension value not met

38 mN/m • 38 dyne/cm
with accuracy +/- 1.0 mN/m
Available in spray bottles

3,4 fl oz / 100 ml

- ideal for very small and large surfaces
- easy handling
- non-toxic
- non-harmful
- non-noxious
- residue-free testing of surfaces
- arcospray ink is easy to spray
- result visible within 2 seconds
- non-contact surface testing

arcotest® ORGANIC transport case

For the transport and storage of test ink bottles.
Ideal for holding bottles during use.

In the production of our green cases, we have completely dispensed with the use of petroleum.
It consists of 93% renewable raw materials such as glucose, natural waxes, minerals, as well as natural fibers.
The case is completely recyclable.



Case SET



ORGANIC case SET 8-piece

- Case content:
- ORGANIC 32–44 mN/m without brush
 - cotton-tipped applicators



PINK case SET 9-piece

- Case content:
- PINK set A 32–44 mN/m without brush
 - arcotestCLEANER 250 ml
 - cotton-tipped applicators



BLUE case SET 9-piece

- Case content:
- BLUE set A 28-56 mN/m without brush
 - arcotestCLEANER 250 ml
 - cotton-tipped applicators

Transport case



Transport case, small
for 7 test ink bottles of 10 ml,
with separate storage for test pens or
cotton tipped applicators



Transport case, small
for 7 test ink bottles of 10 ml,
with separate storage for test pens
or cotton tipped applicators



Transport case, large
for 24 test ink bottles of 10 ml

arcotest® Plasma Set

The **arcotest® Plasma Set** contains the **piezobrush® PZ3** handheld plasma unit for manual surface treatment with atmospheric pressure plasma and an arcotest® OPTIONAL pen set of 4 pens. The set consisting of 4 test pens à 5 ml of your own choice. In addition, the set contains two different modules. Here, the **standard module** is suitable for the treatment of non-conductive materials such as plastics. The **Nearfield module**, on the other hand, is used for the treatment of conductive materials such as stainless steel or CFRP.



- Included in the **arcotest® Plasma Set**:
- arcotest® OPTIONAL pen set consisting of 4 levels of 5 ml-test pens of your choice.
 - Hand-held plasma device piezobrush® PZ3 incl. ventilation system, power supply and cable
 - Module Standard
 - Nearfield module



Detailed product information can be found on the product page from the manufacturer **relyon-plasma**

art. no. 40.00000.8

The **arcotest® Plasma Set** was developed as a compact handheld plasma device for use in laboratories, pre-development and the assembly of small series. With a maximum power consumption of 18 W, the **Piezoelectric Direct Discharge (PDD®)** technology generates cold active plasma at a temperature of less than 50°C. At the heart of this portable plasma device is the **TDK CeraPlas™ piezo plasma generator** - a high-voltage discharge device for generating cold atmospheric pressure plasma. Atmospheric pressure plasma is used to set up the surface tension highly efficient on many materials and to reduce germs and odours.

Application examples:

- Activation and functionalisation of surfaces of various base materials
- Improvement of wettability
- Optimisation of bonding, painting, printing and coating processes
- Surface treatment of plastics, glasses, ceramics, metals, semiconductors, natural fibres and composites
- Fine cleaning and odour reduction

Product overview



Test Inks ORGANIC in bottles

from 30 to 46 mN/m // with accuracy measurement ± 0.5 mN/m // without brush // not subject to labelling



STANDARD set
32 34 36 38 40 42 44 mN/m
7 glass bottles of 10 ml
art. no. 40.20000.4 without brush



OPTIONAL set of 7
30 to 46 mN/m
7 glass bottles of 10 ml of your choice
art. no. 40.20001.4 without brush



10 ml
30 to 46 mN/m
standard and special
art. no. 40.201XX.4 without brush



100 ml
30 to 46 mN/m
standard and special
art. no. 40.202XX.0
art. no. 40.202XX.0 (SE)



250 ml
30 to 46 mN/m
standard and special
art. no. 40.203XX.0
art. no. 40.203XX.0 (SE)



arcoweb®
38 mN/m
Application width 25 mm
art. no. 40.20438.0



arcospray 38®
38 mN/m
labeling required
for small and large areas
art. no. 40.80238.0

Test Inks PINK in bottles

from 22 to 60 mN/m // non-poisonous
with accuracy measurement ± 0.5 mN/m



STANDARD set A
32 34 36 38 40 42 44 mN/m
7 glass bottles of 10 ml
art. no. 40.60000.0 with brush
art. no. 40.60000.4 without brush

STANDARD: 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 mN/m
SPECIAL(SE): 22 24 26 28 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 mN/m



OPTIONAL set of 7
22 to 60 mN/m
7 glass bottles of 10 ml
art. no. 40.60001.0 with brush
art. no. 40.60001.4 without brush



10 ml
22 to 60 mN/m
standard and special
art. no. 40.601XX.0 with brush
art. no. 40.601XX.4 without brush



100 ml
22 to 60 mN/m
standard and special
art. no. 40.602XX.0
art. no. 40.602XX.0 (SE)



250 ml
22 to 60 mN/m
standard and special
art. no. 40.603XX.0
art. no. 40.603XX.0 (SE)

Test Pens ORGANIC

from 30 to 46 mN/m // with accuracy measurement ± 1.0 mN/m // not subject to labelling



STANDARD set of 8
30 32 34 36 38 40 42 44 mN/m
8 test pens
art. no. 40.25000.0



OPTIONAL set of 8
30 to 46 mN/m
8 test pens of your choice
art. no. 40.25001.0



OPTIONAL set of 6
30 to 46 mN/m
6 test pens of your choice
art. no. 40.25002.0



OPTIONAL set of 4
30 to 46 mN/m
4 test pens of your choice
art. no. 40.25003.0



TEST PEN
30 to 46 mN/m
standard and special
art. no. 40.251XX.0

Test Pens PINK

from 22 to 60 mN/m // non-poisonous
with accuracy measurement ± 1.0 mN/m

STANDARD: 30 32 34 36 38 40 42 44 mN/m
SPECIAL (SE): 22 24 26 28 31 33 35 37 39 41 43 45 - 60 mN/m



STANDARD set of 8
30 32 34 36 38 40 42 44 mN/m
8 test pens
art. no. 40.45001.0



OPTIONAL set of 8
22 to 60 mN/m
8 test pens of your choice
art. no. 40.45000.0



OPTIONAL set of 6
22 to 60 mN/m
6 test pens of your choice
art. no. 40.45002.0



OPTIONAL set of 4
22 to 60 mN/m
4 test pens of your choice
art. no. 40.45003.0



TEST PEN
22 to 60 mN/m
standard and special
art. no. 40.451XX.0

Test Pens ORGANIC Jumbo

from 30 to 46 mN/m in steps of 2 // with accuracy measurement ± 1.0 mN/m // not subject to labelling



STANDARD set of 8
30 32 34 36 38 40 42 44 mN/m
8 test pens
art. no. 40.26000.0



OPTIONAL set of 8
30 to 46 mN/m
8 test pens of your choice
art. no. 40.26001.0



OPTIONAL set of 6
30 to 46 mN/m
6 test pens of your choice
art. no. 40.26002.0



OPTIONAL set of 4
30 to 46 mN/m
4 test pens of your choice
art. no. 40.26003.0



TEST PEN Jumbo
30 to 46 mN/m
art. no. 40.261XX.0

Test Pens PINK Jumbo

from 30 to 50 mN/m // non-poisonous // with accuracy measurement ± 1.0 mN/m



STANDARD set of 8
30 32 34 36 38 40 42 44 mN/m
8 test pens
art. no. 40.46000.0



OPTIONAL set of 8
30 to 50 mN/m
8 test pens of your choice
art. no. 40.46001.0



OPTIONAL set of 6
30 to 50 mN/m
6 test pens of your choice
art. no. 40.46002.0



OPTIONAL set of 4
30 to 50 mN/m
4 test pens of your choice
art. no. 40.46003.0



TEST PEN Jumbo
30 to 50 mN/m
art. no. 40.461XX.0

Product overview



Test Inks BLUE in bottles

from 18 to 105 mN/m // toxic from 24 to 57 mN/m // with accuracy measurement ± 0.5 mN/m // 30 to 72 mN/m according to ISO 8296 (DIN 53364 and ASTM)

STANDARD: 28 32 35 38 41 44 48 56 mN/m
SPECIAL (SE): 18 (colourless) 20 22 24 26 29 30 31 33 34 36 37 39 40 42 43 45 46 47 49 50 51 52 53 54 55 57 58 60 62 64 66 68 70 72 mN/m
colourless: 74 76 84 90 105 mN/m



Set A

28 35 38 41 44 48 56 mN/m
7 glass bottles of 10 ml
art. no. 40.30001.0 with brush
art. no. 40.30001.4 without brush



Set B

28 32 35 38 41 44 48 mN/m
7 glass bottles of 10 ml
art. no. 40.30000.0 with brush
art. no. 40.30000.4 without brush



Set C

30 32 34 36 38 40 42 mN/m
7 glass bottles of 10 ml
art. no. 40.30003.0 with brush
art. no. 40.30003.4 without brush



OPTIONAL set

18 (colourless) 20 to 72 mN/m
7 glass bottles of 10 ml of your choice
art. no. 40.30002.0 with brush
art. no. 40.30002.4 without brush



10 ml

18 (colourless) to 72 mN/m
standard and special
art. no. 40.301XX.0 with brush
art. no. 40.301XX.4 without brush



100 ml

18 (colourless) to 72 mN/m
standard and special
art. no. 40.302XX.0
art. no. 40.302XX.0 (SE)



250 ml

18 (colourless) to 72 mN/m
standard and special
art. no. 40.303XX.0
art. no. 40.303XX.0 (SE)



COLOURLESS 10 ml

74 76 84 90 105 mN/m
special
art. no. 40.301XX.0 (SE) with brush

Test PENS BLUE

from 28 - 60 mN/m in steps of one by one // from 62 - 72 mN/m in steps of two by two
toxic from 28 to 57 mN/m // with accuracy measurement ± 1.0 mN/m



OPTIONAL set of 8

28 to 72 mN/m
8 test pens of your choice
art. no. 40.35001.0



OPTIONAL set of 6

28 to 72 mN/m
6 test pens of your choice
art. no. 40.35002.0



OPTIONAL set of 4

28 to 72 mN/m
4 test pens of your choice
art. no. 40.35003.0



TEST PEN

28 to 72 mN/m
art. no. 40.351XX.0

Accessories



COTTON-TIPPED APPLICATORS

approved, 100 piece/pack,
15 cm long
art. no. 40.31700.0



TEST LIGHT

for use in case of low contrast between
measuring surface and test ink
art. no. 40.31600.0



arcotestCLEANER

optimizes cleanliness
content 250 ml
art. no. 40.32000.0

RAPIDTEST 38®



RAPIDTEST 38®

38 mN/m
quick check for polyolefins,
5 ml, Stroke width: 5 mm
art. no. 40.66100.0



RAPIDTEST 38® Jumbo

38 mN/m
quick check for polyolefins,
15 ml, Stroke width: 15 mm
art. no. 40.66100.4



RAPIDTEST 38® refillable

38 mN/m
quick check for polyolefins,
20 ml, Stroke width: 30 mm
art. no. 40.66100.5



RAPIDTEST 38® refill ink

38 mN/m
22 ml
art. no. 40.66200.0

QUICKTEST 38®



QUICKTEST 38®

38 mN/m
quick check for polyolefins,
5 ml, Stroke width: 5 mm
art. no. 40.55100.0



QUICKTEST 38® Jumbo

38 mN/m
quick check for polyolefins,
15 ml, Stroke width: 15 mm
art. no. 40.55100.4

Case SET



arcotest® PINK case SET

Case content:
• PINK set A 32 – 44 mN/m
without brush
• arcotestCLEANER 250 ml
• cotton tipped applicators
art. no. 40.60000.8
art. no. 40.60001.8 (optional set)



arcotest® BLUE case SET

Case content:
• BLUE set A 28 – 56 mN/m
without brush
• arcotestCLEANER 250 ml
• cotton tipped applicators
art. no. 40.30001.8
art. no. 40.30002.8 (optional set)



arcotest® ORGANIC case SET

Case content:
• ORGANIC set 32-44 mN/m
without brush
• cotton tipped applicators
art. no. 40.20000.8
art. no. 40.20001.8 (optional set)

Case



TRANSPORT CASE, large

for 24 test ink bottles of 10 ml
without contents
art. no. 40.31900.0



TRANSPORT CASE, small

for 7 test ink bottles of 10 ml, with
storage for test pen (set of 4) or cotton
tipped applicators
without contents
art. no. 40.31800.0 (blue)
art. no. 40.31800.5 (green)



arcotest® Plasma-Set

Case content:
• handheld plasma device
piezobrush® PZ3 for manual
surface treatment
• arcotest® 4 test pens of your choice
art. no. 40.00000.8



arcotest®

Made in Germany

Test Inks since 1976



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