

Markal®

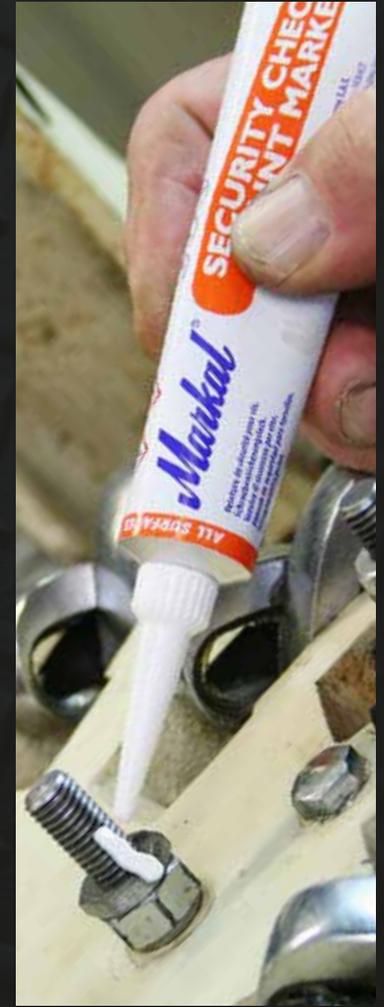
High Performance Industrial Markers

Tempil®

Advanced Temperature Indication Technologies

LA·CO®

Plumbing and Chemical Products



LA·CO INDUSTRIES EUROPE





LA-CO INDUSTRIES

LA-CO Industries, Inc. is a family owned global manufacturing company specializing in the manufacturing of industrial hand-held markers, temperature indicators, plumbing chemicals, and livestock identification products. Since 1934, we have taken pride in the design and manufacturing of high quality, performance-based products for our customers' unique applications.

LA-CO Industries continuously invests in research and development to meet the requirements of a constantly changing and advancing marketplace. Through careful product evaluation and analysis, our chemists create proprietary formulas, which are designed to meet the needs of our customers.

Our experienced customer service representatives are the heart of LA-CO Industries. Interacting with customers every day, our team expertly provides quote, receives orders, prepares documents, assists in product selection and answers customers inquiries. Our manufacturing plants and warehouses in the United States and France allow our logistic specialists to efficiently serve customers' across the globe.

Our marketing department is committed to supporting our partners around the world. Lending our graphic design and creative expertise, we work with distributors to create unique promotions, sampling tools and cross-selling opportunities that are valuable to everyone, but most importantly the end-user.

Our Mission

"We actively listen to our customers, providing them with quality, high-performance products around the world. We are ethically and environmentally responsible and support the growth and well-being of our employees."



**Made in America /
Made in Europe**

For almost 80 years, Markal® has been proudly manufacturing and supplying the industry's largest line of industrial grade markers. Products listed with these symbols are made either in the USA or in Europe with the highest attention to quality and dependability.



Green Product

Products designated with this symbol are part of our Green Solutions for Sustainability product selection. These products meet many or all specifications for reducing health and safety concerns, produced using sustainable and/or recycled materials, are low in VOC levels, and are RoHS compliant.



Low VOC

A Volatile Organic Compound (VOC) is a type of potentially harmful gas emitted by certain solids or liquids, hurting indoor air quality. Products with this symbol emit less amounts of harmful VOC's than other industrial paint markers.



Low Corrosion Colors

Ideal for stainless steel and alloy metals, our Low Corrosion markers have low levels of chlorides, halogens, and sulfur to protect against unwanted degradation, pitting, or general weakening of materials. For more information, see our Low Corrosion Marker Guide.



The IMDS (International Material Data System) is the automobile industry's material data system.

In the IMDS, all materials present in finished automobile manufacturing are collected, maintained, analysed and archived. IMDS facilitates meeting the obligations placed on automobile manufacturers, and thus on their suppliers, by national and international standards, laws and regulations.

Markal®

HIGH PERFORMANCE MARKERS

MARKAL® is the global leader in high-performance, hand-held industrial marking products. From our North American and European manufacturing locations, we support the hardworking contractors that build the world's great bridges, ships, automobiles, homes, office towers, power plants, and many other engineering marvels with MARKAL® products.

Today, Markal®-branded products are sold around the globe. This broad network of long-term business partners provides our customers the highest level of service.

MARKAL® has a marker for every industry. Some industries we are dedicated to serving includes :

- Automotive
- Construction
- Lumber/Timber
- Metal Production
- Oil & Gas
- Ship Building
- Welding and Metal Fabrication

Tempil®

ADVANCED TEMPERATURE INDICATION TECHNOLOGIES

Tempil® is an industrial leader in advanced and accurate temperature indication technologies. From protecting NASA's Space Shuttle Orbiter to measuring critical temperatures of life saving drugs and devices, engineers and professional rely on the accuracy of Tempil® for the most vital applications.

Setting the global standard of innovative, customer-driven solutions, Tempil® branded products deliver the surface measurement solutions, when and where customers need the most.

Our visual temperature indication solutions provide critically accurate surface readings for a variety of industries, including:

- Welding and Metal Fabrication
- Heat Treating and Annealing
- Supply Chain
- Medical Equipment Sterilization

LA-CO®

PLUMBING AND CHEMICAL PRODUCTS

Our LA-CO® brand of high-quality, high-performance plumbing and HVAC chemicals is a globally trusted partner for professional contractors. From homes to skyscrapers to the United States' National Archives Building in Washington D.C., LA-CO® branded thread sealants, fluxes, heat protection products, and repair sealants protect history's most important documents and maintain the world's most precious natural resources.

We are proud to serve multiple industries with our quality chemical compounds. We are committed to serving several industries, including:

- Plumbing
- HVAC
- Pipefitting
- Maintenance Operations
- Commercial and Residential Construction
- Repairs and Replacement Services
- Original Equipment Manufacturing





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Scan the QR-codes along the pages of our catalog and watch our products in action

LIQUID PAINT MARKERS

VERSATILE AND RELIABLE

For over 80 years, Markal® has been the trusted leader in industrial marking solutions because of our commitment to developing new and innovative products for use in some of the world's toughest environments. Ideal for use in the automotive industry, construction, welding, and metal production and fabrication, liquid paint markers are one of the most versatile and relied upon industrial marking tools across the world. These permanent and temporary liquid paint markers offer real paint in multiple tip sizes and colors, including a range of certified colors for nuclear and other corrosion resistant applications.



PERMANENT

Metals

	VALVE ACTION®	SL. 100	CERTIFIED VALVE ACTION®	SL.250/SL.250PMUC	PRO-LINE® HP	PRO-LINE® WP	PRO-LINE® XT	PRO-LINE® HT	PRO-WASH®	SL.130	PRO-LINE® FINE/MICRO	PRO-MAX®	SL.400	POCKET PAINT MARKER	GALVANIZER MARKER	LOW CORROSION FINE MARKER	JUMBO FELTIP PAINT MARKER	SUPER FINE POINT METAL MARKER
Clean, Dry	○	○			○	○	○	○			○	○	○	○			○	○
Rough							○											
Rusty							○											
Oily		○			○										○			
Wet						○												
Low Corrosion			○	○													○	
Nuclear & Military Specifications			○	○														
Annealing								○										
Heat treating								○										

Plastics

Clean, Dry	○	○			○	○	○	○			○	○	○	○			○	○
Rough							○											
Oily					○													
Wet						○												

Rubber

Clean, Dry	○	○			○	○	○				○	○	○	○			○	○
Rough							○											
Oily					○													
Wet						○												

Glass, Ceramic, Brick, Stone

Clean, Dry	○	○			○	○	○				○	○	○	○			○	○
Rough							○											
Wet						○												
Heat treating								○										

Cloth, Fabric

Clean, Dry	○	○									○	○	○	○			○	○
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Painted Surface

Clean, Dry	○	○			○	○	○	○			○	○	○	○			○	○
Rough							○											
Oily					○		○											
Wet						○												

Tile, Polished Stone

Clean, Dry	○	○			○	○	○	○			○	○	○	○			○	○
Wet						○												

REMOVABLE

Non-porous Surfaces

Clean, Dry										○	○						○	
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○ Preferred Selection ◎ Secondary Selection

Valve Action®



VALVE ACTION® PAINT MARKER is a fast-drying liquid paint marker that provides long-lasting, wear- and weather-resistant marks that are safe for almost any surface. As the most versatile liquid paint marker in the world, the xylene-free paint reduces user health risks and is available in 18 bold and fluorescent colors for accurate mark identification.

Features & Benefits

- 14 standard and 4 fluorescent colors for improved mark identification, quality control, and parts inspection
- Fast-drying, permanent paint for immediate handling, reduces work downtime
- Xylene-free paint reduces user health risks and eliminates California Proposition 65, EPA HAPS and SARA 313 concerns in the U.S.A.
- Dura-Nib medium bullet tip resists wear to provide long marking life

- Durable metal barrel and clip-cap reduce breakage and store easily in pocket
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)

Industry Uses

Industrial manufacturing
Automotive and other transportation
Automotive assembly
Metal fabrication
Construction

Welding
Shipping supply
Textile
Aviation and aerospace

Surface Uses

Steel and iron
Plastic
Glass
Pipes and tubes
Rubber and tires
Cloth, fabric (textiles)



Details

Mark Size 3 mm (1/8")

- 96809 ● Brown*
- 96817 ● Purple*
- 96820 ● White**
- 96821 ● Yellow**
- 96822 ● Red*
- 96823 ● Black*
- 96824 ● Orange*
- 96825 ● Blue**
- 96826 ● Green**
- 96827 ● Gold*
- 96828 ● Light Green*
- 96830 ● Pink*
- 96832 ● Aluminium*
- 96835 ● Light Blue*
- 97050 ● Fluorescent Yellow
- 97051 ● Fluorescent Green
- 97052 ● Fluorescent Orange
- 97053 ● Fluorescent Pink

NEW Valve Action® Paint Marker Display

- 199002 Display filled with 32 Valve Action® Paint Markers
(10x ● + 8x ● + 2x ●)



* Indicates that this marker color is low in chlorides, halogens, and sulfurs for low corrosion marking requirements.



SL.100



SL.100 is a xylene-free, low-odor fast-drying liquid paint marker that provides long-lasting marks for almost any surface. The 15 opaque, bright colors are weather- and UV-resistant for excellent mark identification.

Features & Benefits

- 15 colors for excellent mark identification, quality control, and parts inspection
- Fast-drying, indelible permanent paint for immediate handling reduces work downtime
- Xylene-free paint reduces user health risks
- Strong medium bullet tip resists wear to provide long marking life
- Marking range: -20 °C to 50 °C (-4 °F to 122 °F)
- Mark temperature resistance: up to 100 °C (212 °F)

Industry Uses
Automotive and other transportation
Automotive assembly
Industrial manufacturing
Metal fabrication
Construction
Welding
Shipping supply

Surface Uses

Steel and iron
Rubber/Tires
Glass
Plastic
Cloth and fabric (textiles)
Pipes and tubes



Details

Mark Size 3 mm (1/8")

- 31240120 ● White
- 31240220 ● Yellow
- 31240320 ● Red
- 31240420 ● Blue
- 31240520 ● Green
- 31240620 ● Black
- 31240720 ● Orange
- 31240820 ● Purple
- 31240920 ● Grey
- 31241020 ● Pink
- 31241120 ● Brown
- 31241220 ● Light Blue
- 31241320 ● Light Green
- 31241520 ● Silver
- 31241620 ● Gold

NEW Kit SL.100 (6 colors)

- 31200120 ● ● ● ● ● ●

NEW SL.100 Display

- 199001 Display filled with 32 SL100
(12x ● + 8x ● + 3x ● + 3x ● + 3x ● + 3x ●)





PRO-LINE® HP



PRO-LINE® HP is a liquid paint marker developed for superior marking performance on oily and greasy surfaces. The high performance paint penetrates through oils and greases to dry quickly and leave a bold, permanent mark that is wear-, weather-, and fade-resistant.

Details



Mark Size 3 mm (1/8")

- 96960 ● White*
- 96961 ● Yellow*
- 96962 ● Red**
- 96963 ● Black**
- 96964 ● Orange*
- 96965 ● Blue**
- 96966 ● Green*
- 96967 ● Silver**
- 96970 ● Light Green*
- 96971 ● Light Blue**
- 96972 ● Gold*
- 96973 ● Pink**
- 96974 ● Purple*
- 96975 ● Brown**

Features & Benefits

- Unique paint formula resists spreading and dries quickly through oily surfaces to leave precise, permanent marks
- Xylene-free paint reduces user health risks and eliminates California Proposition 65, EPA HAPS and SARA 313 concerns in the U.S.A.
- Durable metal barrel and nib reduce breakage for longer marking life
- Easy-to-grip clip-cap allows for convenient pocket storage
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)



PRO-LINE® HP Display

199005 Display filled with 32 Pro-Line® HP
(12x● + 8x● + 3x●
+ 3x● + 3x● + 3x●)



Industry Uses

Metal fabrication
Automotive and other transportation
Industrial manufacturing
Steel mills and warehouses
Oil and gas
Construction
Aviation and aerospace

Surface Uses

Steel and iron
Aluminum
Pipes and tubes
Plastics
Rubber/Tires



PRO-LINE® WP



PRO-LINE® WP is a liquid paint marker engineered for enhanced marking performance and adhesion on wet surfaces. The fast-drying formula resists spreading and running when in contact with water or water-based fluids to leave a bright, permanent mark.

Details



Mark Size 3 mm (1/8")

- 96930 ● White*
- 96931 ● Yellow*
- 96932 ● Red*
- 96933 ● Black*
- 96934 ● Blue*
- 96935 ● Green*
- 96936 ● Orange
- 96937 ● Silver*

Features & Benefits

- Specially formulated paint resists running or spreading on wet or damp surfaces to leave permanent, highly-visible marks
- Xylene-free paint reduces user health risks and eliminates California Proposition 65, EPA HAPS and SARA 313 concerns in the U.S.A.
- Low in V.O.C.'s and will not contribute to ground-level ozone
- Metal barrel and fiber tip provide durability for longer marking life
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)



Industry Uses

Machining shops
Stamping works
Plasma cutting
Metal fabrication
Ship building and repair
Oil and gas
High-humidity climates
Aviation and aerospace

Surface Uses

Steel and iron
Aluminum
Pipes and tubes
Plastics
Glass
Rubber
Ceramic

* Indicates that this marker color is low in chlorides, halogens, and sulfurs for low corrosion marking requirements.

See explanation on page 2

PRO-LINE® HT



PRO-LINE® HT is a unique liquid paint marker engineered with industry-leading PrismaLock™ technology, which locks in colors for bright, bold marks that can withstand temperatures of up to 982 °C (1,800 °F). By using speciality pigments and resins, this fast-drying paint offers unparalleled durability and mark readability, with some colors retaining easily legible marks up to 1 204 °C (2,200 °F).

Features & Benefits

- Fast-drying, liquid paint marker for high temperature resistance
- Engineered with PrismaLock™ technology for long-lasting colors up to 1,800 °F (982 °C)
- Maximum mark readability (no color):
 - White: 1 148 °C (2,100 °F)
 - Yellow: 1 148 °C (2,100 °F)
 - Black: 1 204 °C (2,200 °F)
 - Blue: 1 093 °C (2,000 °F)
- Xylene-free paint reduces user health risks and eliminates California Proposition 65, EPS HAPS, and SARA 313 concerns in the U.S.A.
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)

Industry Uses

Heat treating
 Annealing
 Metal production
 Metal fabrication
 Welding
 Glass production

Surface Uses

Metals
 Glass
 Ceramics



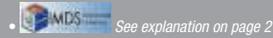
Details



Mark Size 3 mm (1/8")

- 97301 ● White*
- 97302 ● Yellow*
- 97303 ● Black
- 97305 ● Blue

* Indicates that this marker color is low in chlorides, halogens, and sulfurs for low corrosion marking requirements.



PRO-LINE® XT



PRO-LINE® XT is a liquid paint marker engineered for the ultimate marking performance on rough, rusty and dirty surfaces that utilizes an enamel resin to provide enhanced wear-, weather-, and chemical-resistance. The fast-drying paint formula binds quickly to materials to leave a bold, highly-visible mark and is free of Xylene and other harmful chemicals to reduce user health risks.

Features & Benefits

- Engineered for continuous and highly-visible marking on rough, rusty, and dirty surfaces
- Enamel paint for extreme durability and enhanced wear-, weather-, and chemical-resistance
- Available in 14 bold, fast-drying colors for immediate handling and reduced downtime
- Xylene-free paint reduces user health risks and eliminates California Proposition 65, EPS HAPS, and SARA 313 concerns in the U.S.A.
- Durable metal barrel and clip-cap reduce breakage and store easily in pocket
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)



Industry Uses

Steel mills and warehouses
 Metal fabrication
 Oil and gas
 Automotive
 Ship building and repair
 Construction
 Metal production

Surface Uses

Rusty metal
 Steel and iron
 Pipes and tubes
 Plates
 Non-ferrous metals
 Tires/rubber
 Plastic
 Glass and ceramic



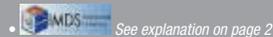
Details



Mark Size 3 mm (1/8")

- 97250 ● White**
- 97251 ● Yellow**
- 97252 ● Red**
- 97253 ● Black**
- 97254 ● Blue**
- 97255 ● Green**
- 97256 ● Orange**
- 97257 ○ Silver**
- 97258 ● Light Green**
- 97259 ● Light Blue**
- 97260 ● Gold*
- 97261 ● Pink*
- 97262 ● Purple*
- 97263 ● Brown**

* Indicates that this marker color is low in chlorides, halogens, and sulfurs for low corrosion marking requirements.



**Details**

Mark Size 3 mm (1/8")

- 96880 ● White*
- 96881 ● Yellow*
- 96882 ● Red*
- 96883 ● Black*

* Indicates that this marker color is low in chlorides, halogens, and sulfurs for low corrosion marking requirements.

Certified Valve Action®

Certified Valve Action® is a highly-visible liquid paint marker pre-certified to contain low levels of chlorides, halogens, low melting point metals and sulfur. Each manufactured batch is individually analyzed and certified to meet U.S.A. and International nuclear and military specifications, and is safe for use on stainless steel and other alloy metals where corrosion resistance is a requirement.

Features & Benefits

- Ideal for use on stainless steel or superalloys in industries that require prevention against corrosion, pitting, or degradation
- Certified to meet the following U.S.A. and international specifications:
 - EDF PMUC
 - MIL - STD-2041D
 - U.S. DOE RDT F-7-3T (expired)
 - U.S. Navy C3070
- Engineered to meet:
 - < 200 ppm total halogens
 - < 250 ppm each low melting point metals
 - < 300 ppm total low melting point metals
 - < 200 ppm sulfur
- Individual lot analysis and certification available at www.markal.com/certified for quick, accurate reference
- Xylene-free paint reduces user health risks and eliminates California Proposition 65, EPA HAPS and SARA 313 concerns in the U.S.A.
- Fast drying formula leaves wear-, weather- and UV-resistant marks
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)

Industry Uses

Nuclear-power generation
Other power generation facilities
Oil and gas
Military
Welding
Aviation and aerospace

Surface Uses

Stainless Steel
Alloy and superalloy metals
Alloy metals

**Details**

Mark Size 3 mm (1/8")

SL.250

- 31200129 ● White*
- 31200229 ● Yellow*
- 31200329 ● Red*
- 31200429 ● Blue*
- 31200529 ● Green*
- 31200629 ● Black*

SL.250 PMUC

- 31600129 ● White*
- 31600229 ● Yellow*
- 31600329 ● Red*
- 31600429 ● Blue*
- 31600629 ● Black*

SL.250 and SL.250 PMUC

SL.250 is a xylene-free, low-odor, and fast-drying liquid paint marker that meets the European nuclear requirements. The low sulfur and low chloride content allows for safe marking on stainless steel. SL.250 PMUC is a unique liquid paint marker certified for nuclear plants in France. Each marker is traceable to a manufactured batch number on the PMUC certificate that is required and controlled by EDF. Its low sulfur and low chloride content is safe for use on stainless steel, alloy, and other super alloy metals where corrosion resistance is a requirement.

Features & Benefits

- Safe for use on stainless steel and other alloy metals where corrosion resistance is a requirement
- SL.250: Paint formula confirmed using a typical analysis to contain:
 - < 200 ppm total halogens
 - < 200 ppm sulfur
- SL.250 PMUC: Each marker is delivered with a batch number and an official certificate with the product shipment
 - Official PMUC certification:
 - < 200 ppm total halogens (chlorides, fluoride, bromide, iodine)
 - < 200 ppm sulfur
- Fast-drying, permanent paint for immediate handling reduces work downtime
- Medium bullet tip resists wear to provide long marking life
- Marking Range: -20 °C to 50 °C (-4 °F to 122 °F)
- Mark temperature resistance: 100 °C (212 °F)

Industry Uses

Nuclear-power generation
Ship building and repair
Power generation facilities
Aviation and aerospace
Oil and gas
Welding
Industrial manufacturing
Metal fabrication

Surface Uses

Stainless steel
Alloy and super alloy metals
Alloy metals

* Indicates that this marker color is low in chlorides, halogens, and sulfurs for low corrosion marking requirements.



Nissen® Low Corrosion Fine Point Paint Marker

NEW
PRODUCTS



The Nissen Low Corrosion Fine Point Paint Marker is engineered to contain low levels of chlorides, halogens, and sulfur with industrial-grade durability marks. The low corrosion paint formula is safe for use on stainless steel, alloys, and other superalloy metals and will not contribute to unwanted corrosion, degradation, or pitting from use.

Features & Benefits

- Fast-drying paint formula is safe for use on stainless steel and eliminates concerns regarding corrosion, degradation, or pitting
- Durable plastic precision nib for fine line marking
- Typical properties:
 - < 200 ppm chlorides and total halogens
 - < 250 ppm each low melting point metals
 - < 250 ppm sulfur
- Xylene-free paint reduces user health risks
- Durable metal barrel reduces breakage
- Marking range: -50°F to 150°F (-46°C to 66°C)

Industry Uses

Power generation facilities
Oil refineries
Ship building and repair
Aviation and aerospace

Surface Uses

Stainless steel
Alloy and superalloy metals



Details

Mark Size 1mm
28780 ● Black



Galvanizer's Removable Marker

NEW
PRODUCTS



The Markal Galvanizer's Removable Paint Marker is designed for fabricators for making durable marks on steel during fabrication. The marks are then designed to be removed completely for galvanizers during the pickling process prior to galvanizing. This eliminates the need for any extensive, expensive, time consuming touch-up work...

Features & Benefits

- Durable paint marks during fabrication. Marks are removed completely during the pickling process
- More marks per marker - more than 2x longer write-out vs leading competitor
- Fast drying and Xylene Free
- Weather resistant paint formula
- Durable acrylic nib marks on smooth, rough and rusty metal surfaces
- Medium bullet tip nib makes precise marks

Industry Uses

Metal fabrication
Galvanizing

Surface Uses

Metals



Details

Mark Size 3 mm (1/8")
28785 ● White
28786 ● Yellow



11

LIQUID PAINT MARKERS



markal.com



Details



Mark Size 3 mm (1/8")
97054 ● UV Visible*

 See explanation on page 2

Valve Action® Ultra Violet

The UV-visible Valve Action® makes an invisible paint mark that glows bright blue when viewed with a UV or black light, making it ideal for security, quality control, tamper-proofing, and anti-counterfeiting processes. The permanent, invisible liquid paint dries quickly to provide long-lasting, weather- and wear-resistant marks.

Features & Benefits

- Makes clear, invisible marks that illuminate bright blue when viewed with an ultraviolet or black light
- Invisible paint formula is ideal for security, theft-prevention, and quality control
- Xylene-free paint reduces user health risks and eliminates California Proposition 65, EPA HAPS and SARA 313 concerns in the U.S.A.
- Fast drying formula reduces smearing
- Dura-Nib medium bullet tip resists wear to provide long marking life
- Durable metal barrel and clip cap reduce breakage and stores easily in pocket
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)

Industry Uses

Industrial manufacturing
Quality control
Security and theft prevention
Construction

Surface Uses

Metal
Plastics
Glass
Pipes and tubes
Ceramics
Tools and equipment



Details



Mark Size 3 mm (1/8")
31200137 ● White
31200237 ● Yellow
31200337 ● Red
31200437 ● Blue
31200537 ● Green
31200637 ● Black

SL.400

SL.400 is a water-based, low-odor liquid paint marker that marks on almost all types of clean surfaces. The 6 opaque, bright colors are weather- and UV-resistant for excellent mark identification.

Features & Benefits

- Special water-based paint formula contains no solvents or VOC emissions reducing user safety and environmental concerns
- 6 vibrant colors for excellent mark identification, quality control, and parts inspection on clean surfaces
- Valve-actuated tip releases paint on-demand for smooth, continuous use
- Medium bullet tip resists wear to provide long marking life
- Marking Range: +5 °C to 40 °C (41 °F to 104 °F)
- Mark temperature resistance: up to 80 °C (176 °F)

Industry Uses

Automotive and other transportation
Industrial manufacturing
Metal fabrication
Welding
Shipping supply

Surface Uses

Steel and iron
Plastic
Rubber and tires
Glass
Pipes and tubes
Cardboard



PRO-MAX® - PRO-LINE® Fine - PRO-LINE® Micro



PRO-LINE® Fine and Micro liquid paint markers combine the durability of paint with the marking precision of fine, valve-actuated tips. Whether marking on small surface areas or where easily-readable marks are required, the small tip sizes provide highly-visible, sharp lines for greater mark identification. PRO-MAX® is a liquid paint marker with an extra-large tip to provide the biggest and most highly-visible marks.

Features & Benefits

- Available in fine and micro tip sizes for precise, permanent paint marking
- Available extra large tip ideal for signage or safety marking where immediate identification is required
- High-strength, lightweight barrel designed for industrial-grade use
- Valve-actuated tip releases paint on demand for smooth, continuous use
- Fine & Micro : Self-storing cap with clip protects tip for longer life and stores easily in pocket

- Xylene-free paint reduces user health risks and eliminates California Proposition 65, EPA HAPS and SARA 313 concerns in the U.S.A.
- Marking range: 0 °F to 150 °F (-18 °C to 66 °C)

Industry Uses

Industrial manufacturing
Welding
Automotive and other transportation
Metal fabrication
Signage
Textile

Surface Uses

Steel and iron
Cloth, fabric (textiles)
Plastics
Glass
Pipes and tubes

Details

Pro-Max

Mark Size 5 x15 mm (9/16")

- | | | |
|-------|---|--------|
| 90900 | ● | White |
| 90901 | ● | Yellow |
| 90902 | ● | Red |
| 90903 | ● | Black |
| 90904 | ● | Orange |
| 90905 | ● | Blue |
| 90906 | ● | Green |



Details

Fine

Mark Size 1.5 mm (1/16")

- | | | |
|-------|---|-------------|
| 96871 | ● | White |
| 96872 | ● | Yellow |
| 96873 | ● | Black |
| 96874 | ● | Red |
| 96875 | ● | Blue |
| 96876 | ● | Green |
| 96877 | ● | Orange |
| 96879 | ● | Light Green |

Micro

Mark Size 0.8 mm (1/32")

- | | | |
|-------|---|--------|
| 96888 | ● | White |
| 96889 | ● | Yellow |
| 96890 | ● | Black |
| 96891 | ● | Red |



Pocket



Markal Pocket is a xylene-free, low-odor fast-drying liquid paint marker in a pocket size that provides long-lasting marks for almost any surface. Its reversible nib (chisel or flat-bullet) offers a variation of marking sizes. The flat-bullet side of the nib is engineered for easy and visible dot-marking.

Features & Benefits

- 6 colors for high visibility, excellent mark identification, quality control, and parts inspection
- Fast-drying, indelible permanent paint for immediate handling reduces work downtime
- Xylene-free paint reduces user health risks
- Strong reversible nib resists wear to provide long marking life
- Tip can be either chisel for broad or thin marks, or flat-bullet for dot-marking
- Marking size: chisel (10mm or 3mm), flat-bullet (10mm dot)
- Convenient pocket size marker: 11,7cm long x 2,5cm in diameter

Industry Uses

Quality Control
Automotive and other transportation
Automotive assembly
Industrial manufacturing
Metal fabrication
Construction
Welding
Shipping supply

Surface Uses

Steel and iron
Cloth, fabric (textiles)
Plastics
Glass
Pipes and tubes

Details



10mm dot

10mm or 3mm

- | | | |
|-------|---|--------|
| 97500 | ● | White |
| 97501 | ● | Yellow |
| 97503 | ● | Black |
| 97502 | ● | Red |
| 97505 | ● | Blue |
| 97504 | ● | Green |



**Details**

Mark Size 8 mm (5/16")

- 28790 ● White
- 28791 ● Yellow
- 28792 ● Red
- 28793 ● Black

Nissen® Jumbo Feltip Paint Marker



The Jumbo Feltip Paint Marker uses high-gloss enamel paint and an extra-large tip for large, easy-to-read marks. The bright, fast-drying paint is easy-to-see to makes wear-, weather- and UV-resistant on almost any surface.

Features & Benefits

- Jumbo-sized tip for extra-bold and easily-visible marks
- Fast-drying enamel paint is wear-, weather-, and UV-resistant for long life
- Available in four bright, easy-to-see colors for improved mark identification, quality control, and parts inspection

Industry Uses

Industrial manufacturing
Automotive and other transportation
Automotive assembly
Metal fabrication
Construction
Welding
Shipping supply
Textile industry
Aviation and aerospace

Surface Uses

Steel and Iron
Plastic
Cardboard
Glass
Pipes and tubes

**Details**

Mark Size 1.2 mm (3/64")

- 28840 ● White
- 28841 ● Yellow
- 28842 ● Red
- 28843 ● Black
- 28844 ● Fluorescent Orange

Nissen® Super Fine Metal Marker



The Super Fine Metal Marker's non-clogging, stainless steel tip makes precise marking easier and has the durability to stand up to hard, rough, and dirty surfaces. The industrial strength paint is available in five bright, easy-to-see colors and marks on almost any surface. Control the amount of paint by squeezing the flexible barrel, and can be carried in your pocket or toolbox without leaking or spilling.

Features & Benefits

- Super-fine, stainless steel tip won't clog for precise, permanent paint marking
- High-strength, flexible barrel for full control over how much paint to write with
- Available in five bright, easy-to-see colors for improved mark identification, quality control, and parts inspection
- Fast-drying, permanent paint for immediate handling reduces work downtime
- Stainless steel tip marks on rusty, rough, or dry surfaces
- Temp Range: -23°C to 315°C (-10F to 600F)
- Dry Time: 1 to 2 minutes

Industry Uses

Steel and iron
Concrete, stone
Asphalt
Masonry
Plastic
Rubber and tires

Surface Uses

Steel and iron
Pipes and tubes
Wood
Plastic
Glass
Cardboard

SL.130



SL.130 is a crayon-based liquid paint that easily wipes away with water from any smooth, non-porous surface without leaving a ghost trace or residue once the mark is removed.

Features & Benefits

- Marks can be easily wiped away with water without leaving a ghost trace or a mark residue
- 9 bright colors including 4 fluors are excellent for temporary mark identification, quality control, and parts inspection
- Medium bullet tip resists wear to provide long marking life
- Valve-actuated tip releases paint on-demand for smooth, continuous use

- Marking Range: +5 °C to 40 °C (41 °F to 104 °F)
- Mark temperature resistance: 80 °C (176 °F)

Industry Uses

Quality control
Automotive aftermarket
Automotive and other transportation
Industrial manufacturing
Metal fabrication
Aviation and aerospace

Surface Uses

Steel and iron
Pipes and tubes
Plates
Alloy and superalloy metals
Non-ferrous metals
Glass
Plastic
Rubber and tires



Details



Mark Size 3 mm (1/8")

- 31200126 ● White
- 31200226 ● Fluorescent Yellow
- 31200326 ● Red
- 31200426 ● Blue
- 31200526 ● Green
- 31200626 ● Black
- 31201826 ● Fluorescent Green
- 31201926 ● Fluorescent Pink
- 31202026 ● Fluorescent Orange



PRO-WASH®



PRO-WASH® W and D are removable liquid paint markers that dry fast and can be quickly and easily washed off of any non-porous surfaces without ghosting or leaving a residue. The unique paints make highly-visible and durable marks until removal is required, making PRO-WASH® ideal for quality control, assembly operations, and part defect identification.

Features & Benefits

- Fast-drying paint easily removes leaving surfaces free of mark ghosting or paint residue
- PRO-WASH® W marks can be removed simply and quickly with water
- PRO-WASH® D marks can be removed with detergent solutions that have a pH level of 10 or above

- Xylene-free paint reduces user health risks and eliminates California Proposition 65, EPA HAPS and SARA 313 concerns in the U.S.A.
- High-strength, light-weight plastic barrel designed for industrial use
- Marking range: -18 °C to 66 °C (0 °F to 150 °F)

Industry Uses

Quality control
Automotive aftermarket
Automotive assembly
Construction
Metal fabrication

Surface Uses

Steel and iron
Glass
Plastic
Pipes and tubes

Details



Mark Size 3 mm (1/8")

PRO-WASH W

- 97030 ● White
- 97031 ● Yellow
- 97032 ● Red
- 97033 ● Black
- 97035 ● Blue
- 97036 ● Green

PRO-WASH D

- 97010 ● White
- 97011 ● Yellow
- 97012 ● Red
- 97013 ● Black
- 97015 ● Blue
- 97016 ● Green



markal.com

BALL PAINT MARKERS

16

BALL PAINT MARKERS

BRIGHT, PRECISE AND PERMANENT

For over 40 years, Markal® has manufactured in its French location the best quality tube marker. With its steel ball tip pressed on a heavy-duty aluminum squeeze tube, and its thick and bright paint, these markers are suitable for most industrial applications. They will be your preferred marker where a bright and precise marking has to be done on a rough, wet or oily surface with a long lasting, UV and water-resistant paint.

E TAG ON PATTERNS WHEN ORDER IS

PIER
FOUNDRY
PATTERN SHOP, INC.

	STYLMARK®	ST.2100/ST.2100PMUC	HT.1000	SECURITY CHECK PAINT MARKER	BALL PAINT MARKER®	NISSEN SOLID BARREL MARKER
PERMANENT						
Metal						
Clean, Dry	⊙	⊙		⊙	⊙	⊙
Rough	⊙	⊙		⊙	⊙	⊙
Rusty	⊙	⊙		⊙	⊙	⊙
Oily	⊙	⊙		⊙	⊙	⊙
Wet	⊙	⊙		⊙	⊙	⊙
Low Corrosion		⊙				
Nuclear & Military		⊙				
Specifications						
Annealing Heat treating			⊙			
Plastics						
Clean, Dry	⊙	⊙		⊙	⊙	⊙
Rough	⊙	⊙		⊙	⊙	⊙
Oily	⊙	⊙		⊙	⊙	⊙
Wet	⊙	⊙		⊙	⊙	⊙
Rubber						
Clean, Dry	⊙	⊙		⊙	⊙	⊙
Rough	⊙	⊙		⊙	⊙	⊙
Oily	⊙	⊙		⊙	⊙	⊙
Wet	⊙	⊙		⊙	⊙	⊙
Glass, Ceramic						
Clean, Dry	⊙	⊙		⊙	⊙	⊙
Rough	⊙	⊙		⊙	⊙	⊙
Wet	⊙	⊙		⊙	⊙	⊙
Brick, Stone						
Clean, Dry	⊙	⊙		⊙	⊙	⊙
Rough	⊙	⊙		⊙	⊙	⊙
Wet			⊙			
Textiles						
Roll before printing			⊙			

⊙ Preferred Selection ⊙ Secondary Selection

Stylmark®



Markal® Stylmark® is a metal-ball tip marker for marking most surfaces. The aluminum squeeze tube and thick paint makes it suitable for rough, vertical and overhead surfaces with excellent adhesion on oily and wet surfaces. Xylene-free paint reduces user health risks.

Features & Benefits

- Durable steel ball tip marks with indelible paint on smooth or rough surfaces
- Steel ball tip is resistant to very rough surfaces for long marking life
- Offered in 2 sizes: 3 mm and 6 mm for varied mark thickness
- 11 bold, bright paint colors are weather-, water-, and UV-resistant
- Unique paint designed to not drip on vertical or overhead surfaces
- Marking range -20 °C to 70 °C (-4 °F to 158 °F)
- Mark temperature resistance: 200 °C (392 °F)

Industry Uses

Steel mills and warehouses
Forge and casting foundries
Ship building and repair
Metal fabrication
Metal production
Construction
Tire industry
Welding
Industrial manufacturing
Automotive and other transportation
Automotive assembly
Oil and gas
Stamping works

Surface Uses

Steel and iron
Concrete, stone
Asphalt
Masonry
Plastic
Rubber and tires
Cloth, fabric (textiles)

Details



Mark Size 3 mm (1/8")

- 10130103 ● White
- 10130203 ● Yellow
- 10130303 ● Red
- 10130403 ● Blue
- 10130503 ● Green
- 10130603 ● Black
- 10130703 ● Orange
- 10130803 ● Purple
- 10130903 ● Grey
- 10131003 ● Pink
- 10131103 ● Brown

Mark Size 6 mm

- 10160103 ● White
- 10160203 ● Yellow
- 10160303 ● Red
- 10160403 ● Blue
- 10160503 ● Green
- 10160603 ● Black
- 10160703 ● Orange
- 10160803 ● Purple
- 10160903 ● Grey
- 10161003 ● Pink
- 10161103 ● Brown

NEW STYLMARK® - Display

199014 Display filled with 12 Stylmark® (5x● + 5x● + 2x●)

NEW STYLMARK® - Unit Box

Mark Size 3 mm (1/8")

- 96652 ● White
- 96653 ● Yellow
- 96654 ● Red
- 96655 ● Black
- 96657 ● Blue
- 96658 ● Green



Nissen® Solid Barrel Metal Marker



The Solid Barrel Metal Marker features a durable aluminum barrel and pump mechanism to effortlessly dispense the perfect amount of paint for precise, permanent marks. The durable, stainless steel tip is specially designed to withstand rough, dirty surfaces while the high-gloss paint make the durable marks easy-to-see.

Features & Benefits

- Unique pump mechanism for smooth paint flow
- Available in five bright, easy-to-see colors for improved mark identification, quality control, and parts inspection
- Ideal for marking on difficult surfaces; hard, rough, rusty, and dirty
- Metal barrel and steel tip provide durability for longer marking life
- Weather-, wear-, and UV-resistant for long-lasting marks

Industry Uses

Steel mills and warehouses
Forge and casting foundries
Ship building and repair
Metal fabrication
Metal production
Construction
Tire
Welding

Surface Uses

Steel and iron
Concrete, stone
Asphalt
Masonry
Plastic
Rubber and tires

Details

Mark Size 3 mm (1/8")

- 28710 ● White
- 28711 ● Yellow
- 28712 ● Red
- 28713 ● Black
- 28714 ● Blue
- 28715 ● Green





Details



Mark Size 3 mm (1/8")

ST.2100

- 10230123 ● White
- 10230223 ● Yellow
- 10230323 ● Red
- 10230423 ● Blue
- 10230523 ● Green
- 10230623 ● Black

ST.2100 PMUC

- 10630123 ● White
- 10630223 ● Yellow
- 10630323 ● Red
- 10630423 ● Blue
- 10630623 ● Black

ST.2100 and ST.2100 PMUC

Markal® ST.2100 is a metal-ball tip marker that meets French nuclear requirements. The low sulfur and low chloride content allows for safe marking on stainless steel. The aluminum squeeze tube and thick paint makes it suitable for vertical and overhead surfaces.

Markal ST.2100 PMUC is a unique metal-ball tip marker certified for nuclear plants in France. Each marker is traceable to a manufactured batch number on the PMUC certificate that is required and controlled by EDF.

Features & Benefits

- Safe for use on stainless steel and other alloy metals where corrosion resistance is a requirement
- 6 low sulfur and low chloride paint colors are weather-, water-, and UV-resistant
- Unique paint designed not to drip on vertical or overhead surfaces
- Marking range -20 °C to 70 °C (-4 °F to 158 °F)
- Mark temperature resistance: 200 °C (392 °F)
- ST.2100 : Paint formula confirmed using a typical analysis to contain:
 - < 200 ppm total halogens
 - < 200 ppm sulfur

- ST.2100 PMUC : Each marker is delivered with a batch number and an official certificate with the product shipment.
- Official PMUC certification:
- < 200 ppm total halogens (chlorides, fluoride, bromide, iodine)
 - < 200 ppm sulfur

Industry Uses

Nuclear-power generation
 Aviation and aerospace
 Ship building and repair
 Military
 Power generation facilities
 Oil and gas
 Welding
 Industrial manufacturing
 Metal fabrication

Surface Uses

Stainless steel
 Alloy and super alloy metals
 Alloy metals



Details



Mark Size 3 mm (1/8")

- 10330131 ● White
- 10330231 ● Yellow

Mark Size 6 mm

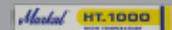
- 10360131 ● White
- 10360231 ● Yellow



NEW PACKAGING HT.1000 - Unit Box

Mark Size 3 mm (1/8")

- 96700 ● White



HT.1000

Markal® HT.1000 is a metal-ball tip marker that is ideal for annealing and heat-treating operations. Marks at ambient temperature and the high-performance paint withstands temperatures up to 1000 °C. The aluminum squeeze tube and thick paint makes it suitable for rough, vertical and overhead surfaces with excellent adhesion on oily and wet surfaces.

Features & Benefits

- High temperature paint is ideal for welds, ingots, castings, forgings, and other annealed parts
- Paint withstands temperatures up to 1000 °C
- Permanent paint marks will not rub off, allowing for long-lasting identification
- Durable steel ball tip marks with indelible paint on rough or smooth surfaces
- Offered in 2 sizes: 3 mm and 6 mm for varied mark thickness

- High-performance paint designed not to drip on vertical or overhead surfaces
- Marking range -20 °C to 70 °C (-4 °F to 158 °F)

Industry Uses

Forge and casting foundries
 Steel mills and warehouses
 Welding
 Heat-treating industry
 Industrial manufacturing

Surface Uses

Steel and iron
 Aluminum
 Rusty metal
 Plates
 Alloy and superalloy metals
 Non-ferrous metals

Security Check Paint Marker

NEW PRODUCTS

MADE IN EUROPE

Security Check Paint Marker provides a convenient visual method for identification of vibratory loosening or tampering in nuts, bolts, fasteners, and assemblies. High visibility paint mark becomes a hard film that breaks easily. Ideal for quality control and warranty work. Safe on most surfaces, adheres perfectly to metal. Safe for the user, doesn't contain Xylene.

Features & Benefits

- High visibility paint for a fast and easy visual check : security indicator or tamper-evident seal on assemblies facilitating detection of any accidental or malicious adjustment movement
- Paint free of heavy metals for a safe use on metal and for the user
- Effective volume superior compared with other products in the market (50 ml paint) for a longer period of use and reduced work downtime

- Marking range -20 °C to 70 °C (-4 °F to 158 °F)
- Mark temperature resistance: 200 °C (392 °F)

Industry Uses

Industrial manufacturing
Maintenance operations

Surfaces Uses

Steel and iron
Stainless steel
Aluminum
Plastic
Rusty metal



Details

- 96668 ● White
- 96669 ● Yellow
- 96670 ● Red
- 96671 ● Blue
- 96672 ● Green
- 96673 ● Black
- 96674 ● Orange
- 96675 ● Purple

Display

- 199013 Display filled with 12 Security Check Paint Marker
(3x ● + 3x ● + 2x ● + 1x ● + 1x ● + 1x ● + 1x ●)

Replacement tips

- 96676 Tip

BALL PAINT MARKER®



Markal® BALL PAINT MARKER® is a liquid paint marker using a durable metal-ball tip for writing on hard surfaces. Ideal for identifying fabricated steel and other rough surfaces that are stored in harsh environments, the squeeze bottle meters paint in a thick or thin line for long-lasting marks.

Features & Benefits

- Durable metal-ball tip resists wear and clogging for long-marking life on rough surfaces
- Non-drip paint formula allows for easy jobsite marking
- Industrial paint withstands harsh environments and weather conditions

- Plastic cap keeps tip clean between jobs
- Marking range -46 °C to 66 °C (-50 °F to 150 °F)

Industry Uses

Steel mills and warehouses
Forge and casting foundries
Ship building and repair
Metal fabrication
Construction
Metal production
Aviation and aerospace

Surface Uses

Steel and iron
Pipes and tubes
Concrete, stone
Asphalt

Details

- Mark Size 3 mm (1/8")
- 84620 ● White*
 - 84621 ● Yellow*
 - 84622 ● Red*
 - 84623 ● Black*
 - 84624 ● Orange
 - 84625 ● Blue
 - 84626 ● Green

* Indicates that this marker color is low in chlorides, halogens, and sulfurs for low corrosion marking requirements.



INK MARKERS

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INK MARKERS

IMMEDIATE MARK AND DRY

Preferred for their ability to immediately mark and dry on almost any type of surface, felt-tip ink markers can be found on almost any job site, in any factory, or throughout warehouses and shipping departments around the world. Our line of DURA-INK® markers utilize industrial-grade construction, tips, and long-lasting inks, making them ideal for use in almost any application.

DURA-INK® Permanent Ink Markers

Roll-Resistant

Composed of sturdy plastic, these impact-resistant caps are designed to offer a quick and complete seal to prevent premature dry-out. The convenient clip caps help the markers to store easily in a pocket or tool belt, and resist rolling off of a table or workbench.

Durable and lightweight barrels

Lightweight enough to reduce hand fatigue, but large enough to be used comfortably even with work gloves, these impact-resistant barrels will hold up in tough working environments and help to extend the life of the marker.

Extra-tough tips

Whether marking on cardboard or steel, the extra-tough tips resist spreading or mushrooming, ensuring long life and accurate marking performance.

Wear-resistant ink formula

Formulated to dry quickly and leave bold, highly-visible marks, the industrial grade ink is safe for use on almost any surface and is wear and water-resistant.





DURA-INK® 5 
Permanent ink marker
with extended micro tip

Details



- 96520 ● Black
- 96522 ● Red
- 96519 ● Blue



NEW DURA-INK® 5 - display

- 199010 Display filled with 44 Dura-Ink® 5 (12x ● + 24x ● + 8x ●)



Mark Size:
1 mm (1/32")



DURA-INK® 15 
Permanent ink marker
with fine bullet tip

Details



- 96022 ● Red*
- 96023 ● Black
- 96025 ● Blue
- 96026 ● Green
- 96027 ○ Silver



NEW DURA-INK® 15 - display

- 199006 Display filled with 44 Dura-Ink® 15 (8x ● + 20x ● + 8x ● + 4x ● + 4x ○)



Mark Size:
1.5 mm (1/16")



DURA-INK® 20 
Retractable permanent
ink marker with fine
bullet tip

Details



- 96575 ● Black
- 96576 ● Red*



NEW DURA-INK® 20 - display

- 199007 Display filled with 32 Dura-Ink® 20 (12x ● + 20x ●)



Mark Size:
1.5 mm (1/16")



DURA-INK® 25 
Medium Chisel Tip

Details



- 96222 ● Red*
- 96223 ● Black



Mark Size:
3 mm to 6 mm
(1/8" to 1/4")

Industry Uses

- Metal fabrication
- Construction
- Automotive and other transportation
- Shipping supply
- Textile industry
- Aviation and aerospace

Surface Uses

- Metal
- Cardboard
- Pipes and Tubes
- Plastic
- Glass
- Lumber / Timber
- Cloth, fabric (Textiles)

* Indicates that this marker color is low in chlorides, halogens and sulfurs for low corrosion marking requirements.



DURA-INK® 55 
Permanent ink marker
with medium chisel tip

Details



- 96528 ● Red*
- 96529 ● Black
- 96530 ● Blue
- 96531 ● Green



- 199008 Display filled with 25 Dura-Ink® 55 (5x ● + 10x ● + 5x ● + 5x ●)



Mark Size:
1.5 mm to 4.5 mm
(1/16" to 3/16")



DURA-INK® 60 
Medium
Bullet Tip

Details



- 96535 ● Red**
- 96536 ● Black*
- 96537 ● Blue*
- 96538 ● Green*



- 199009 Display filled with 25 Dura-Ink® 60 (5x ● + 10x ● + 5x ● + 5x ●)



Mark Size:
3 mm (1/8")



DURA-INK® 200 
Broad
Chisel Tip

Details



- 96914 ● Green
- 96915 ● Blue
- 96916 ● Red*
- 96917 ● Black



Mark Size:
9.5 mm to 16 mm
(3/8" to 5/8")

Industry Uses

- Metal fabrication
- Construction
- Automotive and other transportation
- Shipping supply
- Textile industry
- Aviation and aerospace

Surface Uses

- Metal
- Cardboard
- Pipes and Tubes
- Plastic
- Glass
- Lumber / Timber
- Cloth, fabric (Textiles)

* Indicates that this marker color is low in chlorides, halogens and sulfurs for low corrosion marking requirements.

DURA-INK® WashAway™

The DURA-INK® WashAway™ is a temporary ink marker that will quickly and completely wash off non-porous surfaces with water or cleaning solutions without leaving a residue or ghosting on the surface. Engineered specially for temporary marking applications, the highly-visible ink formula dries quickly to avoid smudging or lost marks and is ideal for use on most metals and glass.

Features & Benefits

- Fast-drying ink formula completely washes off all non-porous surfaces
- High-visibility marks are water and detergent removable without ghosting or residue
- Non-refillable marker to reduce mess and eliminate downtime
- Compact design for improved comfort and control
- Clip cap for easy storage and to reduce rolling off work surfaces
- Xylene-free formula to reduce health risks

Industry Uses

Automotive assembly
Quality control
Metal fabrication
Powder coating
Glass industry
Steel mills and warehouses

Surface Uses

Steel and iron
Glass
Aluminum
Non-porous surfaces



Details

Mark size 3 mm or 8 mm

- 96301 ● Pink
- 96302 ● Blue
- 96303 ● Green



ALL-WEATHER® Plastic Tag Marker



A permanent ink marker engineered with a unique formula to etch into plastic surfaces and tags for long-lasting, highly-visible marks. The valve-actuated tip releases the wear-, weather- and UV-resistant ink on demand for smooth, continuous use.

Features & Benefits

- Unique ink formula etches into polyurethane plastic surfaces and tags for long-lasting, highly-visible marking
- Fade- and weather-resistant ink for extended outdoor exposure
- Heavy-duty aluminum barrel for tough work conditions
- Convenient clip-cap stores marker easily in pockets and eliminates product roll

Industry Uses

Security and theft prevention
MRO
Animal herd management
Construction

Surface Uses

Polyurethane plastics
Animal tag marking
Rubber



Details

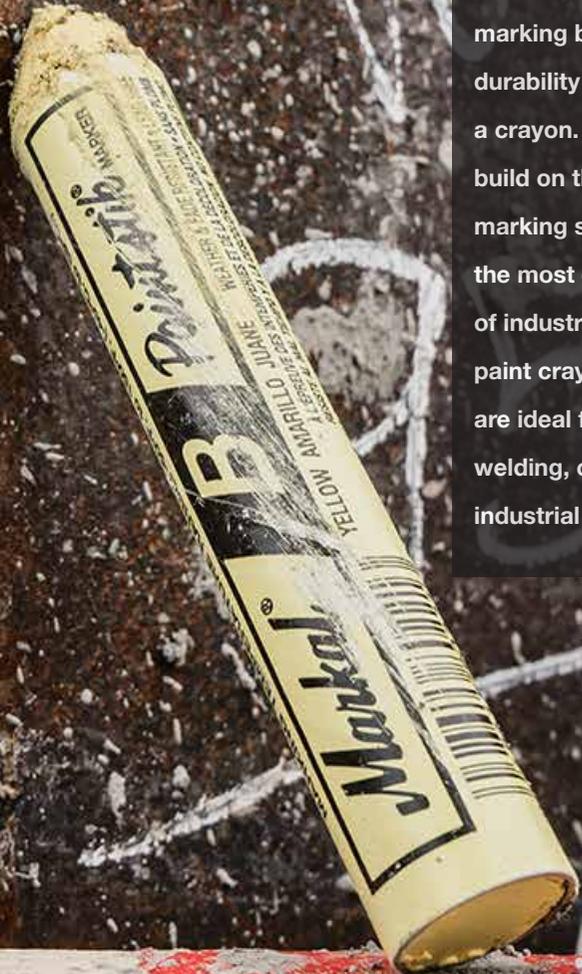
Mark size 5 mm (3/16")

- 96623 ● Black



markal.com

SOLID PAINT MARKERS



DURABILITY OF PAINT CONVENIENCE OF A CRAYON

With the introduction of the original B[®] Paintstik[®] in 1934, Markal[®] changed the face of industrial marking by creating a product that combines the durability of paint with the convenience of a crayon. Since that time, we have continued to build on this innovation by engineering unique marking solutions, making our Paintstiks one of the most diverse and commonly used types of industrial marking tools available. These solid paint crayons can mark almost any surface and are ideal for metal fabrication, metal production, welding, construction, and many other industrial uses.

PERMANENT

Metal

	B [®]	B-E [®]	B-L [®] / BLW [®]	F [®]	M [®] / M-10 [®]	N [®]	P [®]	WS-3/8 [®]	Lacquer-Stik [®]	TYRE MARQUE [®]	Zephyr [®]	Quik Stik [®]	Quik Stik [®] Mini	Nissen [®] Solid Paint Marker	Nissen [®] Solid Paint Marker Low Corrosion
Clean, Dry	⊙		⊙	⊙	⊙	⊙			⊙			⊙	⊙	⊙	
Rough	⊙	⊙	⊙	⊙	⊙	⊙						⊙	⊙	⊙	
Rusty	⊙	⊙		⊙								⊙	⊙	⊙	
Oily	⊙														
Wet	⊙											⊙	⊙	⊙	
Annealing Heat Treating					⊙										
Low corrosion	⊙														⊙

Plastic

Clean, Dry	⊙		⊙	⊙	⊙				⊙			⊙	⊙	⊙	
Rough	⊙	⊙	⊙	⊙	⊙	⊙						⊙	⊙	⊙	
Oily															
Wet	⊙											⊙	⊙	⊙	

Rubber

Clean, Dry	⊙			⊙					⊙			⊙	⊙	⊙	
Rough	⊙			⊙					⊙			⊙	⊙	⊙	
Oily	⊙														
Wet	⊙								⊙			⊙	⊙	⊙	

Glass, ceramic

Clean, Dry	⊙											⊙	⊙	⊙	
Rough	⊙	⊙										⊙	⊙	⊙	
Wet	⊙											⊙	⊙	⊙	

Brick, stone

Clean, Dry	⊙			⊙								⊙	⊙	⊙	
Rough	⊙			⊙								⊙	⊙	⊙	
Wet	⊙	⊙		⊙								⊙	⊙	⊙	

Before painted surface

Bleed-Through Paint			⊙												
No Bleed-Through						⊙									

Painted surfaces

Clean, Dry	⊙			⊙											
Rough	⊙	⊙		⊙											
Oily	⊙														
Wet	⊙			⊙								⊙	⊙	⊙	

REMOVABLE

Non-porous surfaces

Clean, Dry								⊙	⊙			⊙			
------------	--	--	--	--	--	--	--	---	---	--	--	---	--	--	--

⊙ Preferred Selection ⊙ Secondary Selection

B® Paintstik®

As Markal's most versatile and economic marker, the original B® Paintstik® solid paint marker combines the durability of paint in the convenience of a crayon. The real paint formula has superior marking performance on oily, icy, wet, dry or cold surfaces and is weather- and UV-resistant. This Paintstik® works on rough, rusty, smooth, or dirty surfaces.



Features & Benefits

- Real paint for long-lasting, highly visible marks
- Superior marking on rough, rusty, or dirty surfaces
- Solid paint marker eliminates replacement tips, sharpening or priming, increasing productivity
- Easy-to-hold, recyclable paperboard holder protects Paintstik® for maximum use
- Weather- and UV-resistant for long-lasting marks
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)

Industry Uses

Steel mills and warehouses
Forge and casting foundries
Ship building and repair
Metal fabrication
Tire repair and retreading
Lumber and timber industry
Construction

Surface Uses

Steel and iron
Pipes and tubes
Rubber and tires
Lumber and timber
Plastic
Glass
Concrete and stone

Details

Mark Size 17 mm (11/16")

- 80220 ● White*
- 80221 ● Yellow
- 80222 ● Red
- 80223 ● Black
- 80224 ● Orange
- 80225 ● Blue
- 80226 ● Green
- 80227 ● Pink
- 80228 ● Purple
- 80229 ● Brown
- 80230 ○ Grey
- 80232 ○ Aluminium
- 80233 ○ Silver



Details

B-3/8

Mark Size 9.5 mm (3/8")

- 80420 ● White*
- 80421 ● Yellow

B-HEX

Mark Size 12.7 mm (1/2")

- 80250 ● White*
- 80251 ● Yellow

NEW B® PAINTSTIK® - Display

199012 Display filled with 25 B® Paintstik®
(12x● + 6x● + 2x● + 2x● + 2x● + 1x●)



B-E® Paintstik®

Created for very rough surfaces such as forgings, castings, concrete and lumber, the B-E® Paintstik® marks a wider line more clearly seen on cold, wet, dry or oily metal or wood surfaces.

Features & Benefits

- Soft solid paint for easier marking on rough or colder surfaces
- Marks withstand prolonged immersion in water for long mark life
- Weather- and UV-resistant
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)

Industry Uses

Steel mills and warehouses
Metal fabrication
Construction
Lumber/timber

Surface Uses

Steel and iron
Concrete, stone
Lumber/timber Ingots

Details

Mark Size 17 mm (11/16")

- 80620 ● White
- 80621 ● Yellow
- 80622 ● Red
- 80623 ● Black

* Indicates that this marker color is low in chlorides, halogens, and sulfurs for low corrosion marking requirements.

**Details**

Mark Size 17 mm (11/16")

- 82831 ● Fluorescent Yellow
- 82832 ● Fluorescent Red
- 82834 ● Fluorescent Orange
- 82835 ● Fluorescent Blue
- 82836 ● Fluorescent Green
- 82842 ● Fluorescent Pink

F[®] Paintstik[®]

A solid paint crayon that contains bold, fluorescent colors to create high-visibility marks. The F[®] Paintstik[®] is ideal for instant identification especially in low light conditions.

**Features & Benefits**

- Vibrant colors for improved visibility
- Fluorescent marks glow under UV or black light
- Easy-to-hold, recyclable paperboard holder protects Paintstik for maximum use
- Marking range: -50°F to 150°F (-46°C to 66°C)

Industry Uses

Steel mills and warehouses
Forge and casting foundries
Tire repair and retreading
Lumber mills

Surface Uses

Steel and iron
Pipes and tubes
Rubber and tires
Glass
Plastic
Lumber/timber

**Details**

Mark Size 17 mm (11/16")

M[®] Paintstik[®]

- 81920 ● White
- 81921 ● Yellow
- 81922 ● Red
- 81923 ● Black

M-10[®] Paintstik[®]

- 82020 ● White

M[®] and M-10[®] Paintstik[®]

Ideal for annealing and heat-treating operations, the M[®] and M-10[®] Paintstiks mark at room temperature and withstand temperatures up to 982 °C (1800 °F).

**Features & Benefits**

- Marks will withstand immediate quenching in water or oil
- Ideal for welds, ingots, castings, forgings, and other annealed parts
- M[®] Paintstik[®] withstands 871 °C (1600 °F)
- M-10[®] Paintstik[®] withstands 982 °C (1800 °F)
- Durable marks will not rub off, allowing for long-lasting identification

Industry Uses

Forge and casting foundries
Steel mills
Welding
Heat-treating

Surface Uses

Steel and iron
Aluminum

N® Paintstik®



This formulation per stick of solid paint specialized leaves markings not visible through the finishing coat of paint or primer, eliminating the cost of removing the marking.

Features & Benefits

- Marks will not show through top coat of primer or finished layer of paint
- Ideal for ship building or other metal fabrication
- Solid paint formula designed for marking on wet, dry, oily, rusty, icy, smooth, or rough surfaces
- Marking range: -18 °C to 66 °C (0 °F to 150 °F)

Industry Uses

Ship building and repair
Metal fabrication
Construction

Surface Uses

Steel and iron
Lumber/timber
Glass Plastic
Concrete, stone



Details



Mark Size 17 mm (11/16")
82120 ● White



P® Paintstik®



P® Paintstik® is designed for use in pickling baths or galvanizing operations. The marks completely remove and will not interfere with the zinc coating.

Features & Benefits

- Marks remove in pickling baths to allow excellent adhesion for zinc coating
- Superior marking on rough, rusty, oily, or smooth surfaces compared to liquid paint markers
- Solid paint crayon makes wide, bold marks for instant identification
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)

Industry Uses

Metal fabrication

Surface Uses

Steel



Details



Mark Size 17 mm (11/16")
83420 ● White



Lacquer-Stik®



Lacquer-Stik® is a specially formulated solid paint crayon designed to color-brighten stamped or engraved lines and lettering.

Features & Benefits

- Highlighter, fill-in paint provides bold, bright colors for even the smallest engravings
- Rubs in and wipes off easily, dries quickly
- Paint stays flexible, expands and contracts with the surface, for long-lasting color
- No mess or waste, eliminates dripping paint
- Mark temperature resistance: up to 260 °C (500 °F)
- Meets U.S.A. federal specification TT-F-325a I and MIL-STD 171, Finish No. 30.1.1, Type I

Industry Uses

Sporting goods
Trophy engraving
Automotive aftermarket
Electronics

Surface Uses

Gun and gun sights
Plastic and ceramic
Computer components
Household appliances
Name plates
Tools, dials, knobs



Details



Mark Size 9.5 mm (3/8")
51120 ● White
51121 ● Yellow
51122 ● Red
51123 ● Black
51131 ● Gold



**Details**

Mark Size 9.5 mm (3/8")

- 82420 ● White
- 82421 ● Yellow
- 82422 ● Red
- 82423 ● Black

**Details**

Mark Size 12.7 mm (1/2")

- 51420 ● White
- 51421 ● Yellow

**Details**

Mark Size 17 mm (11/16")

- 51321 ● Yellow

WS-3/8® Paintstik®

The smooth-writing WS-3/8® Paintstik® is a removable solid paint crayon. The fine line marks are easily wiped away with water and will not ghost on non-porous surfaces.

Features & Benefits

- Water soluble for easy removal before production or finishing
- Smaller diameter for finer line marking
- Ideal for temporary marking on non-porous surfaces
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)

Industry Uses

Automotive assembly
 Ship building and repair
 Automotive aftermarket
 Tire repair and retreading
 Shipping supply
 Textile

Surface Uses

Plastic Glass
 Painted metals
 Polished aluminium
 Cloth, fabric (textiles)
 Rubber and tires
 Pipes and tubes
 Other non-porous metals

**TYRE MARQUE®**

For temporary marking on tires, the TYRE MARQUE® solid paint crayon marks smoothly on many surfaces. These bright, smear-resistant colors are easily seen in low light areas and are ideal for tire marking.

Features & Benefits

- Smooth marking on rough or dirty surfaces for bold, visible marks
- Marks easily on wet or cold rubber surfaces
- Marking range: -29 °C to 54 °C (-20 °F to 130 °F)

Industry Uses

Tire repair and retreading

Surface Uses

Rubber and tires

**ZEPHYR® Paintstik®**

Ideal for temporary marking of glass and other non-porous surfaces, Zephyr® solid paint crayon is wear-resistant for durable marking and can be wiped off with water.

Features & Benefits

- Water soluble for easy removal from glass and other non-porous surfaces
- Wider, more wear-resistant marks than WS-3/8®
- Marks will not damage surface or ghost after removal
- Marking range: -46 °C to 66 °C (-50 °F to 150 °F)

Industry Uses

Automotive aftermarket
 Automotive assembly
 Metal fabrication

Surface Uses

Glass Ceramic
 Painted metals
 Steel
 Rubber and tires



Quik Stik® and Quik Stik® Mini



Quik Stik® and Quik Stik® Mini are smooth-marking solid paint crayons that dry quickly to leave bold, permanent marks on most surfaces. The durable plastic twist-up holder prevents breakage and keeps hands, clothing, and toolboxes clean.

Features & Benefits

- Fast-drying, vibrant paint marks dry in 5 to 7 minutes
- Quick Stik : 20% more paint than other brands, more marks for the money
- Marks on virtually any surface: wet, smooth, rough, or hot
- Airtight, self-storing cap keeps the marker clean and fresh between uses
- Compact plastic holder with clip cap stores easily in pocket and keeps hands and clothing clean
- Solid paint marker advances and retracts by turning twist-up knob
- Marking range: -18 °C to 200 °C (0 °F to 392 °F)

Industry Uses

Metal fabrication
Automotive aftermarket
Construction
Welding
Industrial process piping
Shipping supply

Surface Uses

Pipes and tubes
Glass
Steel and iron
Lumber and timber
Concrete and stone
Rubber and tires
Plastic
Ceramic



Details

Mark Size 6 mm (1/4")

- 61126 ● White
- 61127 ● Yellow
- 61128 ● Red
- 61129 ● Black

NEW Quik Stik® Mini - Display

199003 Including 44 Quik Stik® Mini
(12x● + 12x● + 10x● + 10x●)



Details

Mark Size 17 mm (11/16")

- 61049 ● Red
- 61050 ● Black
- 61051 ● White
- 61053 ● Yellow
- 61069 ● Green
- 61070 ● Blue
- 61071 ● Orange
- 61073 ● Purple
- 61041 ● Fluorescent Yellow
- 61042 ● Fluorescent Green
- 61043 ● Fluorescent Orange
- 61044 ● Fluorescent Pink

NEW Quik Stik® Fluor 4 Pack

61045 ●●●●

NEW Quik Stik® - Display

199004 Including 25 Quik Stik®
(10x● + 8x● + 2x● + 2x● + 2x● + 1x●)



Nissen® Solid Paint Marker Standard and Low Corrosion



The smooth marking Standard Solid Paint Marker uses specially formulated paint for long-lasting marks on metal, wood, plastic, glass, and many other surfaces. The durable plastic barrel protects the marker from breaking and the bright, easy-to-see marks won't chip, peel, fade, or rub-off. Engineered to be low in chlorides, all other halogens, and sulfur, the Low Corrosion Solid Paint Marker will not contribute to unwanted corrosion, degradation, or general weakening to stainless steel and various other alloy metals for use in highly sensitive equipment.

Standard

- Industrial-strength paint dries quickly for long-lasting, permanent marks
- Solid paint marker easily advances for paint on demand
- Marks on virtually any surface: wet, smooth, or rough
- Airtight, self-storing cap keeps the marker clean and fresh between uses
- Weather- and UV-resistant paint for long-lasting mark

- Marking range: -50°F to 150°F (-46°C to 66°C)
- Cured marks will withstand temperatures in excess of 250 °C (500 °F).
- Dry Time: 1 minute

Low Corrosion

- Engineered to meet:
 - < 200 ppm chlorides and total halogens
 - < 250 ppm each low melting point metals
 - < 250 ppm sulfur

Industry Uses

Nuclear
Military
Ship building and repair
Oil & Gas
Welding
Automotive
Construction

Surface Uses

Stainless steel
Alloy
Steel and iron
Glass
Ceramic
Lumber & timber
Concrete, stone
Rubber and tires

Details

Mark Size 17 mm (11/16")

- 28770 ● White
- 28771 ● Yellow
- 28772 ● Red
- 28773 ● Black
- 28774 ● Blue
- 28775 ● Green
- 28776 ● Fluorescent Yellow

Details

Mark Size 17 mm (11/16")

- 28760 ● White
- 28761 ● Yellow
- 28762 ● Red
- 28763 ● Black



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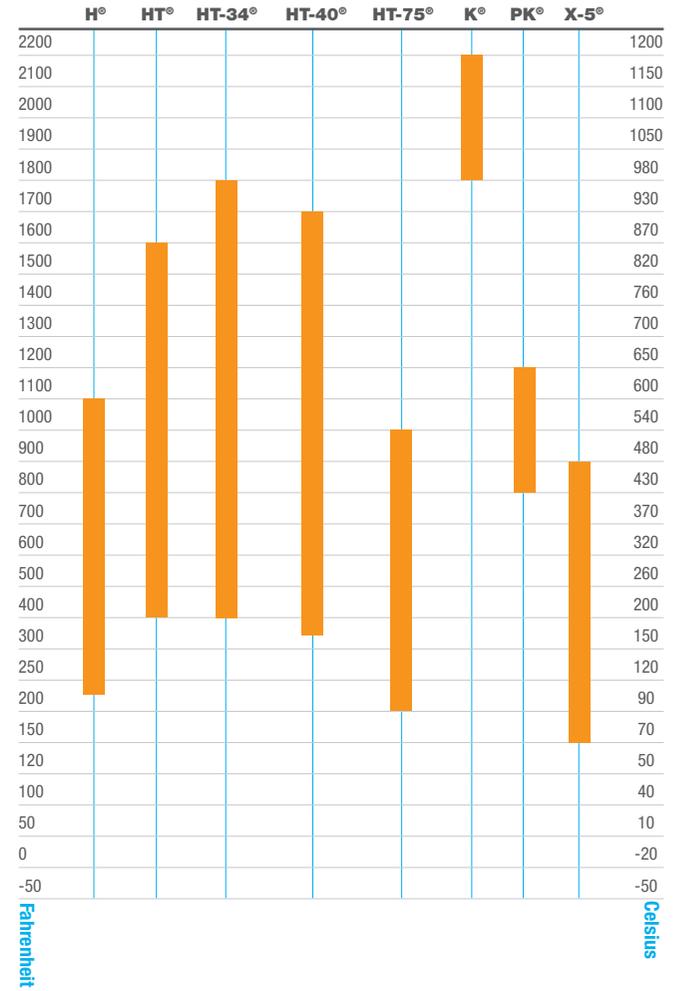
SOLID PAINT MARKERS - HOT SURFACE

30

SOLID PAINT MARKERS - HOT SURFACE

EXTREME TEMPERATURES

The tools required in a smelter or forge and casting foundries must be able to consistently perform and be able to withstand extreme temperatures, and industrial markers are no exception. Our hot surface line of solid paint markers will only begin producing marks when in the stated working temperature, and will provide long-lasting, highly-visible marks that will not run, char, flow, discolor, peel, or crack. With rated temperatures, from 49 °C (120 °F) to 1204 °C (2200 °F) these markers are ideal for use on coils, billets, bars, lingots, and plates.





Features & Benefits

- Hot surface marker writes on hot castings, forgings, coils, billets, plates and other hot metal surfaces
- Fast-drying marks are permanent and will not run, char, flow, discolor, peel or crack
- Forgings and parts can be immediately dipped into cold water baths without damaging the marks
- Real paint for long-lasting, highly visible marks. Can be removed in pickling baths

Industry Uses

- Forge and casting foundries
- Steel mills and warehouses
- Aluminum mills
- Smelting mills
- Glass industry

Surface Uses

- Coils
- Billets and bars
- Castings and pigs
- Ingots and plates
- Rails and beams
- Glass

H[®] Paintstik[®]



Marking range:
107 °C to 593 °C
225 °F to 1100 °F

Details



Mark Size 9.5 mm (3/8")

- 81020 ● White
- 81021 ● Yellow
- 81022 ● Red
- 81023 ● Black
- 81025 ● Blue
- 81026 ● Green

HT[®] Paintstik[®]



Marking range:
204 °C to 871 °C
400 °F to 1600 °F

Details



Mark Size 9.5 mm (3/8")

- 81220 ● White
- 81221 ● Yellow
- 81222 ● Red
- 81223 ● Black
- 81225 ● Blue
- 81226 ● Green

HT-34[®] Paintstik[®]



Marking range:
204 °C to 982 °C
400 °F to 1800 °F

Details



Mark Size 9.5 mm (3/8")

- 84720 ● White

HT-40[®] Paintstik[®]



Marking range:
177 °C to 927 °C
350 °F to 1700 °F

Details



King Size
Mark Size 19 mm (3/4")

- 81610 ● White



markal.com



Features & Benefits

- Hot surface marker writes on hot castings, forgings, coils, billets, plates, and other hot metal surfaces
- Fast-drying marks are permanent and will not run, char, flow, discolor, peel, or crack
- Forgings and parts can be immediately dipped into cold water baths without damaging the marks
- Real paint for long-lasting, highly-visible marks

Industry Uses

Forge and casting foundries
Steel mills and warehouses
Aluminum mills
Smelting mills

Surface Uses

Coils Billets and bars
Castings and pigs
Ingots and plates
Rails and beams
Glass Rubber (HT-75®)

HT-75® Paintstik®



Marking range:
93 °C to 538 °C
200 °F to 1000 °F

Details



King Size

Mark Size 19 mm (3/4")
84820 ● White

K® Paintstik®



Marking range:
982 °C to 1204 °C
1800 °F to 2200 °F

Details



King Size

Mark Size 19 mm (3/4")
81820 ● White

X-5® Paintstik®



Marking range:
66 °C to 482 °C
150 °F to 900 °F

Details



Mark Size 9.5 mm (3/8")

82520 ● White



HOLDERS



ENHANCE DURABILITY AND CONFORT

Markal® holders protect your solid paint crayons, paintstiks, lumber and scanning crayons from damage during use.

HOLDERS

#100 #102 #107 #108 FM.001 #111

COLD SURFACES

B®		⊙					
B®3/8			⊙				
B-E®		⊙					
F®		⊙					
M® - M10®		⊙					
N®		⊙					
P®		⊙					
WS-3/8®			⊙				
Lacquer-Stik®							
Tyre-Marque®				⊙			
Zephyr®		⊙					
Ultrascan®							
Scan-It® Plus							
FM.120					⊙		
Pro-EX®				⊙			
LC.200				⊙			

HOT SURFACES

H®	⊙						⊙
HT®	⊙						⊙
HT-34®	⊙						⊙
HT-40®	⊙						⊙
X5®	⊙						⊙

Industry Uses

- Steel mills and warehouses
- Metal fabrication and construction
- Ship building and repair
- Lumber/timber
- Tire repair and retreading

Surface Uses

- Rubber and tires
- Aluminum, steel and iron
- Concrete and stone
- Structural steel Pipes and tubes



Holder 102



Features & Benefits

- Durable metal holder promotes long work-life for all standard 11/16" (1.7 cm) size Markal® solid paint markers
- Adjustable mechanism easily advances paint marker
- Designed for use with the following Markal® standard size solid paint markers: B®, B-E®, B-L®, BL-W®, F®, M®, M-10®, N®, P®
- For safer distance marking, 0.6 m (24") and 0.9 m (36") extensions are available for special order



Holder 107



Features & Benefits

- Dependable holder protects fine size Markal® Paintstiks® for long work life
- Easy-to-use, push-button design reduces work downtime
- For safer distance marking, 0.6 m (24") and 0.9 m (36") extensions are available for special order
- Designed for use with the following Markal® solid paint markers: B-3/8® and WS- 3/8®



Holder 108

Features & Benefits

- Heavy-duty metal holder helps prevent breakage, reducing costs
- Push-button advancing reduces downtime for increased productivity
- Comfortable leather wrist strap helps prevent dropping
- Designed for use with all 1.3 cm (1/2") Markal® hex-shaped markers: Lumber crayons #200, Pro- EX® and Tyre Marque®
- For safe distance marking, 0.6 m (24") and 0.9 m (36") extensions are available for special order



Details

Length 15.2 cm (6")

85100 Marker Holder



Marker not included



Details

Length 14 cm (5.5")

85300 Marker Holder



Marker not included



Details

Length 15.2 cm (6")

85400 Holder 108



Marker not included





Holder FM.001

Features & Benefits

- Metal teeth of holder firmly grip the crayon to secure marker during use
- Push-button design allows for easy advancing and retracting of the crayon
- Designed for use with the Markal® FM.120 crayon

Industry Uses

Construction
Lumber and timber
Industry
Shipping supply

Surface Uses

Asphalt
Concrete
Masonry

Details

Length 11.4 cm

44009999 ● Holder FM.001



Holder 100



Features & Benefits

- Durable wooden holder protects the marker during use for long marking life
- Adjustable metal ring secures marker in holder
- Designed for use with the following Markal® hot surface solid paint markers: H®, HT®, HT-34®, HT-40®, X-5®

Industry Uses

Steel mills
Forge and casting foundries
Heat-treating
Metal fabrication
Metal production

Surface Uses

Hot metal surfaces
Rubber and tires

Details

Length 10.2 cm (4")

85500 Marker Holder



Holder 111



Features & Benefits

- The longest metal holder for hot surface marking
- Durable, push-button metal holder is easy to use, even with heavy-duty gloves
- Designed for use with the following Markal® hot surface solid paint markers: H®, HT®, HT-34®, HT-40®, X-5®
- For safer distance marking, 0.6 m (24") and 0.9 m (36") extensions are available for special order

Industry Uses

Steel mills
Forge and casting foundries
Heat-treating
Metal fabrication
Metal production

Surface Uses

Rubber and tires
Hot metal surfaces

Details

Length 28 cm (11")

85700 Marker Holder



WELDING MARKERS

36

WELDING MARKERS

LONG-LASTING AND VISIBLE

The first step to creating a durable, long-lasting weld is using the best tools available to meet the level of precision required during the process. Markal® offers the best in economical and specialized welding markers to produce longer-lasting and more visible marks guaranteed to not contaminate or cause inclusions, pitting, or porosity in the weld. The temporary range of welding markers includes Welders Pencils, soapstone, and other high-visibility layout markers.



Silver-Streak® & Red-Riter® Welders Pencils



Markal® Silver-Streak® and Red-Riter® welders pencils make torch-resistant marks that will not burn or rub off like soapstone. Ideal for fine line marking during metal layout and fabrication, these highly visible marks illuminate when cutting or welding.

Features & Benefits

- Reflective lead illuminates when cutting or welding for improved visibility
- The soapstone alternative: marks resist torch flames; will not rub, burn or blow off
- Durable marks will not scratch or abrade metal surfaces
- Available in two highly visible colors: red for aluminum or other bright metals, silver for darker surfaces
- High-strength, hex-shaped pencil reduces barrel roll unlike competitive brands
- Pre-sharpened pencils can be easily resharpened with any standard pencil sharpener

Industry Uses

Welding
Metal fabrication
Ship building and repair
Bridge fabrication
Construction

Surface Uses

Steel and iron
Aluminium



Details

96100 ● Red
96101 ○ Silver



Silver-Streak®



Markal® Silver-Streak® metal markers are ideal when highly-visible, torch-resistant marks are required during metal layout and fabrication work. The unique reflective lead is more visible through a welder's filter plate and will not rub, burn or blow off like soapstone. Marks on all metal surfaces including oily or wet.

Features & Benefits

- Highly visible marks illuminate when cutting or welding
- Superior to soapstone in markability and durability; will not rub, burn or blow off surface
- Marks on oily, wet or rusty metals, and will not scratch or abrade surfaces
- Available in flat and round shapes
- Durable holders prevent stick breakage
- Durable, mechanical holder prevents stick breakage and features a convenient, built-in sharpener and pocket clip for easy storage

Industry Uses

Welding
Metal fabrication
Ship building and repair
Bridge fabrication
Construction

Surface Uses

Steel and iron
Aluminum
Stainless steel



Details

Refill Pack
96007 Round Refills - 6 refills/pack



Holder

96006 Round Holder





TRADES-MARKER® DRY

TRADES-MARKER® DRY is a graphite clutch pencil with an extended fine tip. Fully designed in metal for more resistance than plastic holder, it incorporates a convenient sharpener and a clip. It can be used with Welding refills featuring Silver Streak® and Red Riter® leads. Markal Silver-Streak® and Red-Riter® welding refills make torch-resistant marks that will not burn or rub off like soapstone. Ideal for fine line marking during metal layout and fabrication, these highly visible marks illuminate when cutting or welding.

Features & Benefits

- Silver-Streak® Refills - Unique silver reflective lead perfect for welding and fabricating
- Red-Riter® Refills - Red lead perfect for welding and fabricating on aluminum, stainless steel and other light metals
- Durable and heat-resistant marks last longer than soapstone
- For use only with Markal Trades-Marker® Dry
- $\varnothing=2.8\text{mm}$, $L=125\text{mm}$.
- Silver-Streak® and Red-Riter®: Made in the U.S.A.

Industry Uses

Welding
Metal fabrication
Ship building and repair
Bridge fabrication

Surface Uses

Steel and iron
Aluminum
Stainless steel

Details

Bulk	96260	Trades-Marker® Dry (+1 graphite lead ○)	
Refills	96267	(x6 Silver Streak ○)	
	96268	(x6 Red-Riter ●)	
Starter Pack Welding	96281	(96260 + 96267) Trades-Marker® Dry +1 pack of Silver Streak leads	
Display Welding	96269	x20 (96260) + x10 (96267) + x10 (96268)	



Soapstone including FM.400

All-natural soapstone is the economical, versatile solution for temporary marking during welding operations. Marks are easily removed and will not contaminate welds.



Details

80129	Flat (127 x 13 x 5 mm)		
80130	Round (127 x \varnothing 6 mm)		

Holder

80140	Flat Holder	
80141	Round Holder	

FM.400

100 x 10 x 10 mm		
44030100 ●	Square	

Features & Benefits

- Temporary marks can be easily removed
- Marks will not contaminate weld or damage metal surface
- Marks illuminate when cutting or welding
- Holders for flat and round shapes reduce breakage

- For more visible and durable marks, see our Silver-Streak® and Red-Riter® metal markers
- Available in three easy to hold shapes: flat, round and square

Industry Uses

Welding
Metal fabrication
Ship building and repair
Bridge fabrication
Construction Textile

Surface Uses

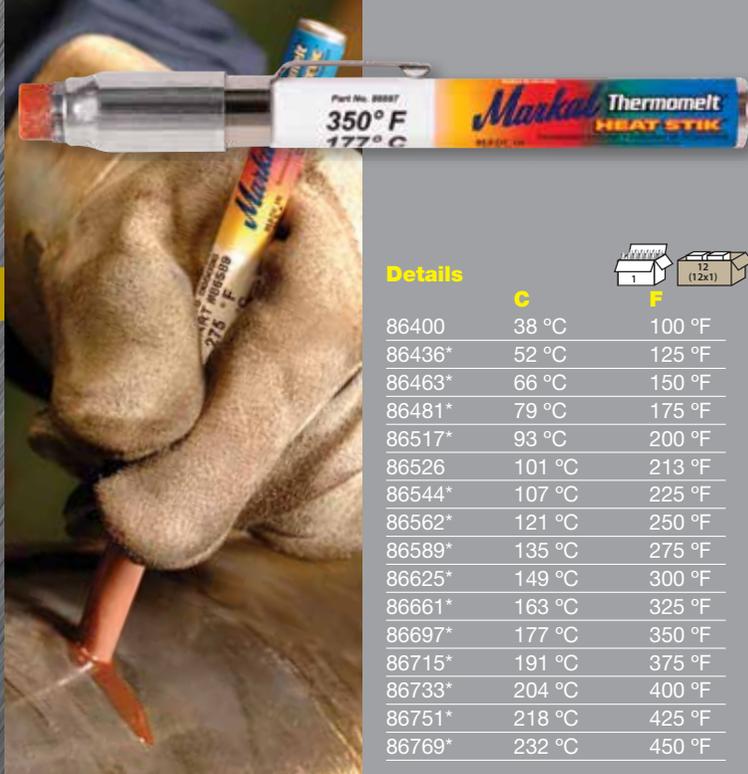
Steel and iron
Aluminum
Stainless steel
Cloth, fabric (textiles)

TEMPERATURE INDICATORS

FAST ACCURATE RESULTS

For the best in weld integrity, heating base materials to highly specific temperatures is required and our line of Thermomelt® temperature indicators offers the best combination of speed, ease of use, and accuracy. The simple-to-use stick melts quickly when applied to a surface at the stated temperature on the package to guarantee fast and accurate results every time without calibration.





Thermomelt® HEAT-STIK®

Thermomelt® HEAT-STIK® markers are a quick, low-cost method to accurately measure surface temperatures of various metals and equipment. Available in various Fahrenheit temperatures, and some Celsius temperatures, the stick-in- holder design provides convenience and durability for long-lasting use in the workshop or in the field.

Details

	C	F
86400	38 °C	100 °F
86436*	52 °C	125 °F
86463*	66 °C	150 °F
86481*	79 °C	175 °F
86517*	93 °C	200 °F
86526	101 °C	213 °F
86544*	107 °C	225 °F
86562*	121 °C	250 °F
86589*	135 °C	275 °F
86625*	149 °C	300 °F
86661*	163 °C	325 °F
86697*	177 °C	350 °F
86715*	191 °C	375 °F
86733*	204 °C	400 °F
86751*	218 °C	425 °F
86769*	232 °C	450 °F



Features & Benefits

- When the stick melts, the precise temperature is reached
- Long-lasting stick is 33% bigger than competition
- Accurate to within +/- 1% of F° and +/- 3% C° rated temperatures; no need for sensor calibration
- Ideal for: pre-heating, post-weld

heat treating, interpass temperature monitoring, stress-relieving and annealing

- Protective holder, shirt-clip and adjustment ring prevents breakage
- Meets welding codes: AWS D1.1, ANSI/ASME Code B32.1 & B31.3, ASME Code Sec. I, III, and VII, NIST Traceable

Industry Uses

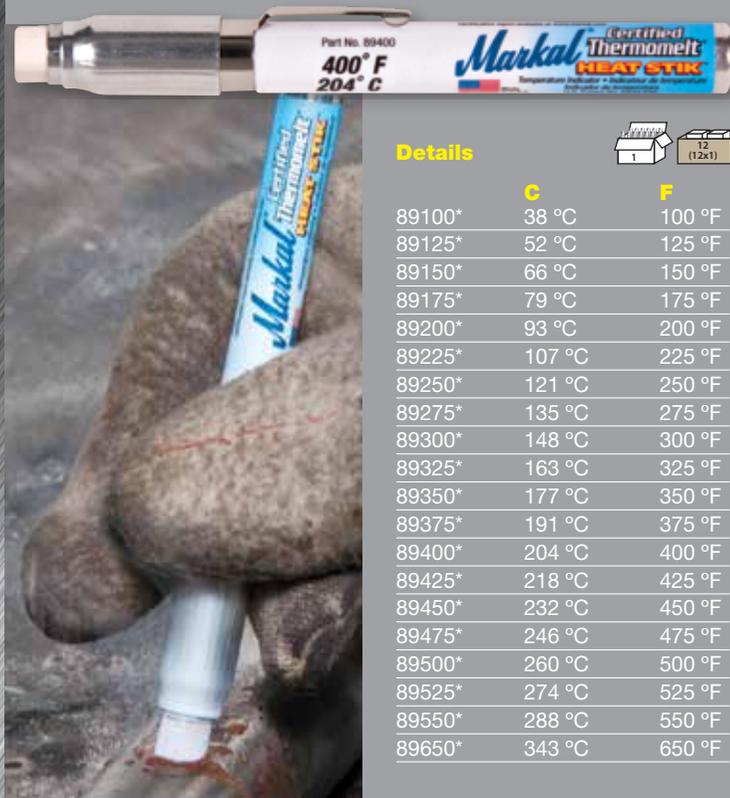
Welding
Ship building and repair
Bridge fabrication
Metal fabrication
Forge and casting foundries
Railroad
Steel mills

Surface Uses

Steel and iron

86787*	246 °C	475 °F
86805*	260 °C	500 °F
86823*	288 °C	550 °F
86841	316 °C	600 °F
86859*	343 °C	650 °F
86868	371 °C	700 °F
87021	774 °C	1425 °F

	C
86402	50 °C
86401	100 °C
84664	150 °C
86516	200 °C
86563	250 °C
86734	400 °C



Certified Thermomelt® HEAT-STIK®

Pre-certified to meet nuclear and military low-corrosion specifications for stainless-steel fabrication and other super alloys, the Markal® Certified Thermomelt® HEAT-STIK® is a quick method to accurately measure metal surface temperatures and equipment. The 20 available temperatures are lot traceable for jobsite documentation.

Details

	C	F
89100*	38 °C	100 °F
89125*	52 °C	125 °F
89150*	66 °C	150 °F
89175*	79 °C	175 °F
89200*	93 °C	200 °F
89225*	107 °C	225 °F
89250*	121 °C	250 °F
89275*	135 °C	275 °F
89300*	148 °C	300 °F
89325*	163 °C	325 °F
89350*	177 °C	350 °F
89375*	191 °C	375 °F
89400*	204 °C	400 °F
89425*	218 °C	425 °F
89450*	232 °C	450 °F
89475*	246 °C	475 °F
89500*	260 °C	500 °F
89525*	274 °C	525 °F
89550*	288 °C	550 °F
89650*	343 °C	650 °F



Features & Benefits

- Certified to meet the following U.S.A. and international specifications:
 - EDF PMUC
 - MIL
 - STD-2041D
 - U.S. DOE RDT F-7-3T (expired)
 - U.S. Navy C3070
- Engineered to meet:
 - < 200 ppm total halogens
 - < 250 ppm each low melting point metals
 - < 300 ppm total low melting point metals
 - < 200 ppm sulfur

- Individual lot analysis and certification available at markal.com/certified for quick, accurate reference
- Protective holder, shirt-clip and adjustment ring prevents breakage and improves handling

Industry Uses

Ship building and repair
Nuclear-power generation
Other power generation facilities
Oil and gas
Military

Surface Uses

Stainless Steel
Alloy and superalloy metals

* Indicates that this marker color is low in chlorides, halogens, and sulfurs for low corrosion marking requirements.





TRADES-MARKER® DRY

NEW
PRODUCTS

TRADES-MARKER® DRY graphite and colored Refills can write or mark on all types of surfaces and materials (dusty, rough, smooth, greasy, wet, dark, etc.) Markal Silver-Streak® and Red-Riter® welding refills for Trades-Marker® Dry make torch-resistant marks that will not burn or rub off like soapstone. Ideal for fine line marking during metal layout and fabrication, these highly visible marks illuminate when cutting or welding.

Features & Benefits

- Fine tip extends to 45 mm, ideal for hard-to-reach places (allows for deep markings, in fixation holes)
- Cap, body and clip in metal to ensure durability and strength for professional use
- Automatic lead ejection: a single press on the button pushes the lead out by 2 mm
- Practical as it is always at hand, the sharpener is incorporated
- Sturdy clip for hooking onto shirts or pants
- Lead easy to replace: unscrew the push button, insert the new lead, screw the button back in (colored lead must already be sharpened before insertion)
- Graphite and colored Refills - can write or mark on all types of surfaces and materials (dusty, rough, smooth, greasy, wet, dark, etc.). Marking range < 40°C
- Silver-Streak® Refills - Unique silver reflective lead perfect for welding and fabricating
- Red-Riter® Refills - Red lead perfect for welding and fabricating on aluminum, stainless steel and other light metals
- Durable and heat-resistant marks last longer than soapstone
- Uses lead 2.8 mm in diameter, compatible with other refill types on the market

Industry Uses

Construction
Lumber and timber industry
Welding
Metal fabrication
Maintenance services

Surface Uses

Steel and iron
Stone
Tile
Ceramic
Lumber
Glass
Plastic



Details

Bulk



100
(10x10)

96260 Trades-Marker® Dry (+1 graphite lead ○)

Refills



50
(50x1)

96262 (x6 ○)
96265 (x6 ●)
96266 (x6 ●)
96263 (x2 ● + x2 ● + x2 ○)

Welding Refills

96267 (x6 Silver Streak ○)
96268 (x6 Red-Riter ●)

Starter Pack



10
(1x10)

96264 (96260 + 96263) Trades-Marker® Dry +1 pack of assorted colors
96281 (96260 + 96267) Trades-Marker® Dry +1 pack of Silver Streak leads

Starter Pack Welding

Display



1

96261 x20 (96260) + x10 (96262) + x10 (96263)
96269 x20 (96260) + x10 (96267) + x10 (96268)
96280 x20 (96260) + x5 (96267) + x5 (96268) +
x3 (96262) + x3 (96263) + x2 (96265) + x2 (96266)

Display Welding

Display Mix

TRADES-MARKER®

TRADES-MARKER® has the marking versatility of a paper-wrapped grease pencil combined with simple push-button advance that helps reduce cost and waste. This refillable, all-surface marker leaves a wear-resistant mark and is safe for all surfaces.

Features & Benefits

- Great for many surfaces including: smooth, rough, rusty, or dirty surfaces
- Marks are rub- and weather-resistant, leaving a bold, permanent mark
- Marker refills eliminate mess and paper waste of grease pencils, saving time and money
- Holder maximizes complete use of marker
- Durable plastic holder helps prevent breakage and keeps hands and clothing clean
- Push-button advancing makes for easy, one-handed use

Industry Uses

Construction
Automotive and other transportation
Quality control
Welding
Metal fabrication
Textile

Surface Uses

Steel and iron
Pipes and tubes
Stone
Tile
Ceramics
Lumber
Cloth, fabric (textiles)
Glass
Plastic

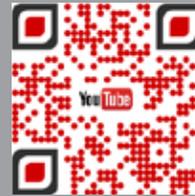


Details

Starter Pack

(1 Holder/12 Refills)

- 96130 ● White
- 96131 ● Yellow
- 96132 ● Red*
- 96133 ● Black*
- 96137 ● Orange



TRADES-MARKER® WS

TRADES-MARKER® WS is a refillable, all-surface marker that leaves a removable mark and is safe for all surfaces. Marks can be wiped away easily with water.

Features & Benefits

- Marks can be easily wiped away with water, ideal for quality control and temporary marking needs
- Great for many surfaces including: smooth, rough, rusty, or dirty surfaces
- Marker refills eliminate mess and paper waste of grease pencils, saving time and money
- Durable plastic holder helps prevent breakage and keeps hands and clothing clean
- Push-button advancing makes for easy, one-handed use

Industry Uses

Automotive and other transportation
Quality control
Glass
Metal fabrication

Surface Uses

Glass
Plastic
Stone
Non-porous surfaces
Steel and iron
Tile
Ceramics



Details

Starter Pack

(1 Holder/12 Refills)

- 96190 ● White
- 96191 ● Yellow
- 96192 ● Black
- 96193 ● Red



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**Details**

- 96010 ● White
- 96011 ● Yellow
- 96012 ● Red
- 96013 ● Black
- 96014 ● Crimson
- 96015 ● Blue
- 96016 ● Green

CHINA MARKER

The paper-wrapped grease pencil is a smooth-writing, economical marker for marking almost any surface.

**Features & Benefits**

- Low-cost, general purpose marker for smooth writing on most surfaces
- Moisture-resistant marker, can be used effectively in most climates
- No sharpening required; pull string and unwrap paper
- High-visibility colors for instant identification

Industry Uses

Glass industry
Automotive and other transportation
Metal fabrication
Quality control
Construction

Surface Uses

Glass
Metals
Ceramic
Cardboard
Plastic
Wood
Paper

**Details**

Size 120 mm x 11 mm

- 44010100 ● White
- 44010200 ● Yellow
- 44010300 ● Red
- 44010400 ● Blue
- 44010500 ● Green
- 44010600 ● Black

FM.120

Markal® FM.120 is a wax-based marking crayon that works in all weather conditions. The marks are weather- and fade-resistant for long-lasting visibility.

Features & Benefits

- Marks on rough surfaces, such as concrete, wood, steel, and cardboard
- Formulated for weather- and fade-resistant marking on indoor and outdoor surfaces
- Softer formula allows for superior marking in cold climates
- Available in 6 bright colors for instant identification
- Marking range: -20 °C to 50 °C (-4 °F to 122 °F)

Industry Uses

Construction
Stone and masonry
Lumber and timber industry

Surface Uses

Steel
Wood
Concrete and stone
Plastic
Rubber

**Details**

Size 127 mm x 13 mm

- 80350 ● White
- 80351 ● Yellow
- 80352 ● Red
- 80353 ● Black
- 80354 ● Orange
- 80355 ● Blue
- 80356 ● Green
- 80358 ● Purple

LUMBER CRAYON 200

Markal® Lumber Crayon 200 is a soft, standard-grade lumber crayon for general-use marking and works well in cold climates. The wax-based mark is weather- and UV-resistant.

Features & Benefits

- Known in construction trades as “keel” or layout chalk
- Formulated for weather- and fade-resistant marking on most surfaces
- Special softer formula allows for superior marking in cold climates
- Marking range: -29 °C to 66 °C (-20 °F to 150 °F)

Industry Uses

Construction
Stone and masonry
Lumber and timber industry

Surface Uses

Steel
Wood
Concrete and stone
Plastic
Rubber



FM.213 / FM.220 / FM.230

Industrial square chalk for temporary marking on most surfaces. Marks are easy to remove and its square design offers a variety of line widths.

Features & Benefits

- Marks are easily wiped away
- Square shape provides various mark sizes
- Paper holder keeps hands clean during use (FM.213)

Industry Uses

- Construction
- Industrial manufacturing
- Metal fabrication
- Metal production
- Welding
- Lumber and timber industry
- Tire repair and retreading

Surface Uses

- Steel and iron
- Wood
- Concrete
- Rubber
- Plastic
- Asphalt

Details

FM.213

Size 90 x 13 x 13 mm
44060100 ● White



FM.220

Size 100 x 20 x 20 mm
44070100 ● White



FM.230

Size 100 x 30 x 30 mm
44080100 ● White



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GENERAL PURPOSE MARKERS

SM.500



SM.500 is a 500 ml spot marker with high-pigmented fluorescent paint for high visibility on any surface. This exterior-grade paint degrades slowly under UV exposure making it ideal for outdoor job sites like highways, commercial construction sites, pipelines, and land development.

Features & Benefits

- Paint adheres to most surfaces and dries quickly for increased work productivity
- Opaque fluorescent paint improves mark visibility in all weather conditions
- UV-resistant paint slowly degrades, extending mark life on outdoor surfaces
- Security cap prevents unintended paint release
- Seven colors for color coding on job site
- Marking range: -15 °C to 50 °C (5 °F to 122 °F)

Industry Uses

- Construction
- Oil and gas
- Utilities

Surface Uses

- Underground utility lines
- Asphalt
- Concrete, stone
- Construction sites



Details

- 40100100 ● White
- 40100200 ● Fluorescent Yellow
- 40100400 ● Fluorescent Blue
- 40100500 ● Fluorescent Green
- 40101000 ● Fluorescent Pink
- 40101600 ● Fluorescent Red
- 40101700 ● Fluorescent Orange



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ULTRASCAN®



Markal® ULTRASCAN® lumber grading crayons provide the best color separation and character recognition in the industry for grade mark readers.

Details



Size 17 mm (11/16")

- 82447 ● Yellow 63
- 82459 ● Bright orange 44
- 82467 ● Bright Red 34
- 82468 ● Neon orange 103
- 82469 ● Bright Brown 45
- 82470 ● Tangerine 03

Features & Benefits

- Bright colors provide the highest fluorescent response of any lumber grading marker
- Maximum character recognition and accuracy for the lowest possible reject rates
- Each batch is tested to meet the specifications for Lucidyne ColorScan® and Newnes-McGehee grade mark readers.
- Unique formula provides excellent writing on wet and green lumber, even with fungicide coating
- 6 colors for superior color separation compared to com-petitive fluorescent wax crayons
- One hardness for all temperatures, eliminates duplicate inventory
- Dramatically longer use, provides up to 4X the writing life of competitive crayons

Industry Uses

Lumber/timber

Surface Uses

Lumber
Wood products



SCAN-IT® Plus



Markal® SCAN-IT® Plus is a versatile grade marking crayon with multiple hardnesses and sizes to mark most lumber types in varying production environments.

Details



Size 17 mm (11/16")

Medium

- 82336 ● Orange Sherbet
- 82337 ● Watermelon Red
- 82339 ● Grasshopper Green
- 82346 ● Emerald Green

Hard

- 82236 ● Orange Sherbet
- 82237 ● Watermelon Red
- 82239 ● Grasshopper Green
- 82245 ● Pink Lightning
- 82246 ● Emerald Green

Features & Benefits

- Each batch is tested to meet the specifications for Lucidyne ColorScan® grade mark readers
- Superior color separation for accurate grading compared to competitive crayons
- Makes smear-resistant marks, reduces scanning errors
- Up to 5 fluorescent colors in 2 hardnesses for varying production environments

Industry Uses

Lumber /timber

Surface Uses

Lumber
Wood products



ZS.124 / ZS.130



ZS 124 & ZS.130 are rectangular carpenter pencils, ideal for marking wood, cardboard, and other surfaces. The premium quality wood resists breaking when stored with heavy tools. Available in 24 and 30 cm.

Features & Benefits

- HB. Soft lead is easy to sharpen
- Rectangular design prevents rolling on surfaces and is easy to use
- Red varnish coating protects pencil for outdoor use
- High-quality wood resists breaking when stored with heavy tools
- Unsharpened when delivered

Details



24cm ZS.124 44091124 44092124
 30cm ZS.130 44091130 44092130



ZS.224 / ZS.230



ZS 224 & ZS.230 are rectangular masonry pencils, ideal for marking on stone and other hard surfaces. The premium-quality wood resists breaking when stored with heavy tools. Available in 24 and 30cm.

Features & Benefits

- 10H. Soft lead is easy to sharpen
- Hard Graphite lead for great durability
- Rectangular design prevents rolling on surfaces and is easy to use
- Green varnish coating protects pencil for outdoor use
- High-quality wood resists breaking when stored with heavy tools
- Unsharpened when delivered

Details



24cm ZS.224 44091224 44092224
 30cm ZS.230 44091230 44092230



ZS.324



ZS.324 is a red varnished triangular pencil, ideal for marking on every kind of smooth surfaces, including glass. The premium-quality wood resists breaking when stored with heavy tools.

Features & Benefits

- 7B. Soft lead is easy to sharpen
- Graphite lead easy to remove
- Triangular design prevents rolling on surfaces and fits well in the hand.
- Red varnish coating with dipped end protects pencil for outdoor use
- High-quality wood resists breaking when stored with heavy tools
- Sharpened when delivered

Details



24cm ZS.324 44090324



ZS.424



ZS.424 is a blue varnished rectangular pencil, ideal for marking on wet wood. When used dry, it leaves a gray mark similar to a pencil's lead, but which cannot be erased. When used wet, its tip moistened by water produces an indelible bright purple writing.

Features & Benefits

- Soft lead is easy to sharpen
- Rectangular design prevents rolling on surfaces and fits well in the hand.
- Blue varnish coating protects pencil for outdoor use
- High-quality wood resists breaking when stored with heavy tools
- Unsharpened when delivered

Details



24cm ZS.424 44091424 44092424



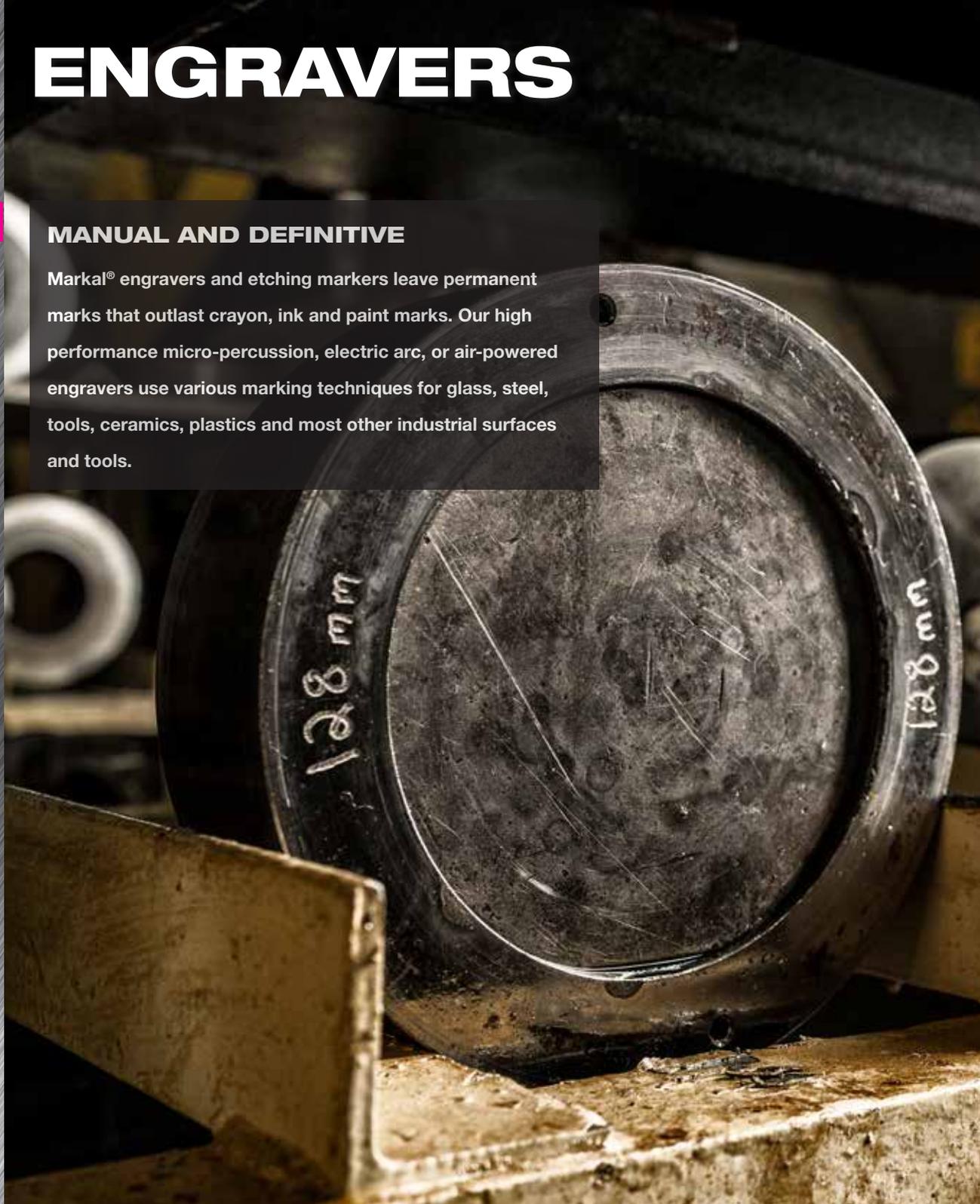
ENGRAVERS

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ENGRAVERS

MANUAL AND DEFINITIVE

Markal® engravers and etching markers leave permanent marks that outlast crayon, ink and paint marks. Our high performance micro-percussion, electric arc, or air-powered engravers use various marking techniques for glass, steel, tools, ceramics, plastics and most other industrial surfaces and tools.



	VG.490	CA.003	PN.500	SC.862	SC.865
PERMANENT					
Metals					
Construction Steel	⊙	⊙	⊙	⊙	⊙
Stainless Steel	⊙	⊙	⊙	⊙	⊙
Copper	⊙	⊙	⊙	⊙	⊙
Nickel	⊙	⊙	⊙	⊙	⊙
Lead	⊙	⊙	⊙	⊙	⊙
Bronze	⊙	⊙	⊙	⊙	⊙
Plastics					
Clean, Dry	⊙	⊙	⊙	⊙	⊙
Glass, Ceramic					
Clean, Dry	⊙	⊙	⊙	⊙	⊙
Painted Surface					
Clean, Dry	⊙	⊙	⊙	⊙	⊙

⊙ Preferred Selection ⊙ Secondary Selection

CA.003



Markal® CA.003 is an electric arc engraver designed to mark conductive metal surfaces. With 100 arcs/second the arc engraver will leave a highly visible, permanent black mark that can outlast crayon or paint marks.

Features & Benefits

- Burns deeply into the conductive metals using a 40 watt arc strength and 100 arcs/second for bold, permanent marks
- Produces an accurate mark and, unlike crayons or paint, will not smear, crack, peel or chip
- Engraving marks are unaffected by weather and UV-light for long-lasting identification
- Fill in the deep marks for increased visibility with Markal Lacquer-Stik®
- Carrying case included for easy storage and transport
- Product includes: 12-15V transformer, engraver, pack of ten 1 mm electrodes, conductive plate receptacle and carrying case
- One year parts and labor warranty
- Fast repairs made at LA-CO® Industries Europe S.A.S. facility
- Quality-made in France since 1970
- CE approved

Industry Uses

Maintenance repair operations
Industrial manufacturing
Automotive and other transportation
Security and theft prevention
Welding
Quality control

Surface Uses

Tools
All conductive metals



Details



- 50421003 Complete machine
- 50422010 10 Electrodes

Spare Parts



- 50400000 Transformator
- 50421001 Electric arc marking pen
- 50422011 Contact plate



VG.490

Universal engraver for all materials from soft to extra hard surfaces like iron, steel, glass, non ferrous metal, stone, ceramic plastic, wood, and more. Easy and convenient, our VG.490 is plugged directly into mains and is used like a pen. Delivered with diamond hard metal and carbide tip, one pack of 2 modelling tips for soft metals such as copper, tin and aluminium...

Details



50431700 Complete machine

Spare Parts



50431720 Adapter
 50431721 Diamond tip
 50431722 Carbide tip (pack x 5)
 50431723 Modelling tips (1 of each)

Features & Benefits

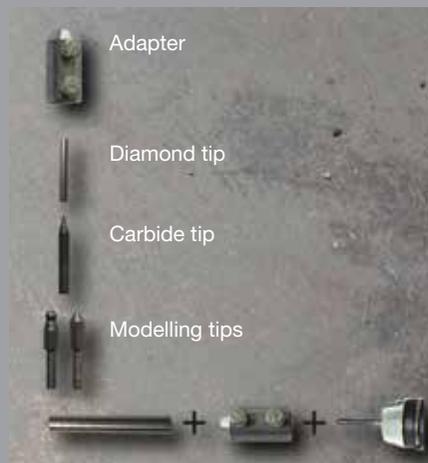
- Micro-percussion tool produces impacts for bold, permanent marks on multiple surfaces
- Produces an accurate mark and, unlike crayons or paint, will not smear, crack, peel or chip
- Engraving marks are unaffected by weather and UV-light for long-lasting identification
- Fill in the deep marks for increased visibility with Markal® Lacquer-Stik®
- Complete with one box including 4 tips and an adapter for marking various surfaces
- Carrying case included for easy storage and transport
- Vibration strength: a (peak)~ = 74,02 m/s² = 7,545 g (peak value) a (rms)~ = 52,34 m/s² = 5,336 g (rms-value/root-mean-square-value)
- Cable length: 1.8 m
- CE approved

Industry Uses

Maintenance repair operations
 Industrial manufacturing
 Automotive and other transportation
 Security and theft prevention
 Welding
 Quality control

Surface Uses

Tools
 Hardened steel
 Glass
 Wood
 Plastic



PN.500

Markal® PN.500 is an air-powered engraving machine that produces 500 impacts/second making this industrial product ideal for high volume assembly line operations. The pneumatic engraver will leave a permanent mark on most surfaces that can outlast crayon or paint marks.

Features & Benefits

- High-frequency impacts produce deep, highly-visible marks on various surfaces
- Ideal for continuous use on assembly lines or anywhere high-volume engraving is required
- Produces an accurate mark and, unlike crayons or paint, will not smear, crack, peel or chip
- High-quality steel body for industrial applications
- No transformer : lightweight for easy operation
- Use compressed air supply (6 BAR maximum) to adjust depth of marks
- Long one meter connection hose for flexibility at work station
- Fill in the deep marks for increased visibility with Markal® Lacquer-Stik®
- Carbide tip 0.35 mm included
- Other tips available: 0.20 mm and 0.50 mm

Industry Uses

Industrial manufacturing
Automotive and other transportation
Quality control

Surface Uses

Steel
Alloy and super alloy metals
Glass
Plastic



Details

50431500 PN.500
50432001 Carbide tip 0.20 mm
50432002 Carbide tip 0.35 mm
50432003 Carbide tip 0.50 mm



SC.800

Markal® SC.800 is an etching pen that releases acid on demand to permanently mark most metal surfaces. Use the SC.871 neutralizing solution to control the acid etching process. Two replacement cartridges are available for different metal etching applications.

Features & Benefits

- Permanent etched mark for identification on various metal surfaces
- The acid etch produces an accurate mark and, unlike crayons or paint, will not smear, crack, peel or chip
- Hand-held etching marker is portable; does not need a power or air supply
- Ideal for identification, security, and theft prevention
- Two replaceable cartridges:
 - SC.862 blue cartridge to etch steel used in construction or tools
 - SC.865 green cartridge to etch stainless steel, copper, nickel, lead, alloy, and bronze
- SC.871 neutralizing solution stops the etching process for improved control

Industry Uses

Maintenance repair operations
Metal fabrication
Industrial manufacturing

Surface Uses

Steel
Alloy and super alloy metals



Details

Acid pen
50121800 SC.800



Acid Refill

50122004 SC.862 Blue
50122005 SC.865 Green



Neutralizing Solution

50122871 SC.871



DOT MARKERS

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DOT MARKERS

AUTONOMOUS, RELIABLE AND ECONOMICAL

Markal® has developed autonomous dot markers that could be integrated into a machine. Based on same technology as our Stylmark®, our STYLOTUBE will mark on many kind of surfaces with a bright and permanent mark, for quality control or processing.





PN.200



RS.PN200 is an automated metal-ball tip marker for high volume dot marking applications on assembly lines. Designed for easy installation into an automated process, the pressurized hands-free marking system allows for full use of the replacement RS-type cartridges.

Features & Benefits

- Fully automated marking system allows for continuous paint delivery on horizontal or vertical surfaces
- Requires use of compressed air supply (0.2 BAR)
- Pneumatic device improves productivity over manual marking products
- Pressurized system ensures full use of replacement paint cartridges
- Refillable burnished metal holder keep hands and clothing clean
- Durable steel ball tip marks on rough or smooth surfaces
- Offered in 3 sizes: 2 mm, 3 mm and 6 mm for varied mark thickness

Details



96601 PN.200 3 mm



PN.200D



Markal® Stylotube RS.PN200D is an automated metal-ball tip marker designed for vertical, overhead or horizontal dot marking applications on assembly lines. The space-saving design allows for easier installation in automated processes and the pressurized hands-free marking system allows for full use of the replacement RS-type cartridges.

Features & Benefits

- Fully automated marking system allows for continuous paint delivery on horizontal or vertical surfaces
- Requires use of compressed air supply (0.2 BAR)
- Pneumatic device improves productivity over manual marking products
- Pressurized system ensures full use of replacement paint cartridges
- Refillable burnished metal holder keep hands and clothing clean
- Durable steel ball tip marks on rough or smooth surfaces

Details



96602 PN.200D 3 mm



RS.2000



Markal® RS.2000 replacement paint cartridge can be used with all Markal® Stylotube marking products. The low-sulfur, low-chloride, and low-halogen formula allows for safe marking on all surface, even oily.

Features & Benefits

- Unique paint designed to not drip on vertical or overhead surfaces
- 11 bold, bright paint colors are weather-, water-, and UV-resistant
- Safe for use on stainless steel and other alloy metals where corrosion resistance is a requirement
- Marking range -20 °C to 70 °C (-4 °F to 158 °F)
- Mark temperature resistance: 200 °C (392 °F)

Details



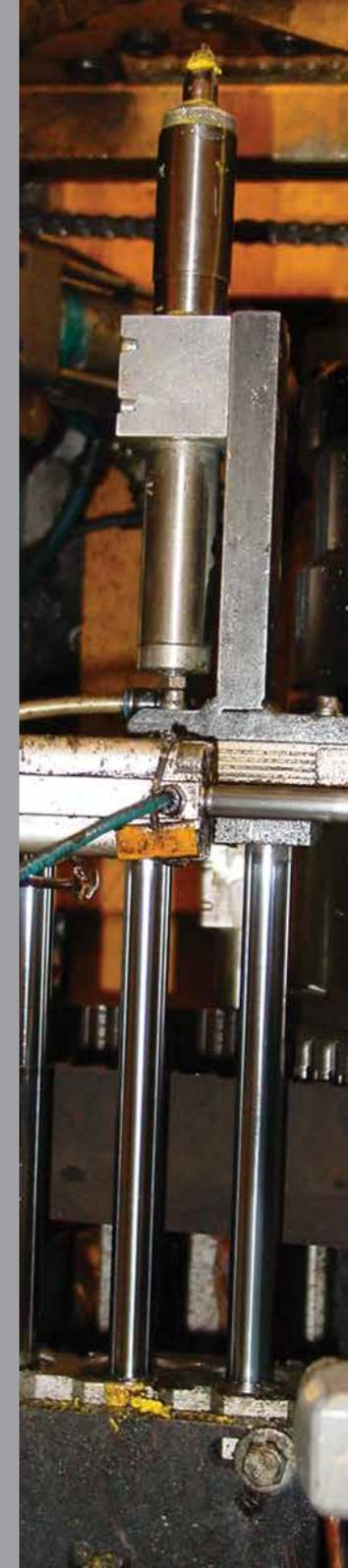
- 96603 ● White
- 96604 ● Yellow
- 96605 ● Red
- 96606 ● Blue
- 96607 ● Green
- 96608 ● Black
- 96609 ● Orange
- 96610 ● Purple
- 96611 ○ Grey
- 96612 ● Pink
- 96613 ● Brown

Industry Uses

Quality control
Automotive and other transportation
Industrial manufacturing and assembly
Tire industry

Surface Uses

Steel and iron
Aluminum
Plastic Rubber and tires
Cloth and fabric (textiles)



TEMPIL® TEMPERATURE INDICATORS

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TEMPIL® TEMPERATURE INDICATORS

LEADER IN ADVANCED TEMPERATURE INDICATION TECHNOLOGIES

Since 1938, Tempil® has been a leader in the development of innovative and accurate temperature indication technology for multiple markets. Our cost-effective solutions can monitor your supply chain, check critical temperatures in the manufacturing process or ensure a products' performance in the field. With our Tempil® products, we have utilized advanced and reliable indication and prevention technology, to produce a range of surface temperature products that allow for safe and versatile surface measurements.

Costefficient, easy-to-use, and available in multiple formats to meet your specific application needs. Tempil® is delivering the surface measurement solutions you can count on, when you need them most.



TEMPILSTIK®

Tempilstik® is the original temperature-indicating stick. An inexpensive alternative for surface temperature measurement, Tempilstik® is rugged and easy-to-use with no gauges or electronics and no calibration is required, available in over 100 temperature ratings from 38 °C to 1093 °C (100 °F to 2000 °F).



Features & Benefits

- Accurate... results are +/- 1% of rated temperature
- Easy to use... melts at designated temperature for easy visual inspection
- Reliable... always in calibration
- Superior quality... free of contaminants such as sulfur, lead and halogens
- Outlasts... designed to be stronger and last longer than other brands
- Precise... unique slip-resistant metal holder secures stick and maximizes control
- Efficient... fast results reduce set up and down time
- Traceable... each marked by temperature, lot number and is NIST traceable

Industry Uses

- Welding
- Ship building and repair
- Bridge fabrication
- Metal fabrication
- Forge and casting foundries
- Railroad
- Steel mills

Surface Uses

- Steel and iron

Details



Tempilstik® Fahrenheit Temp

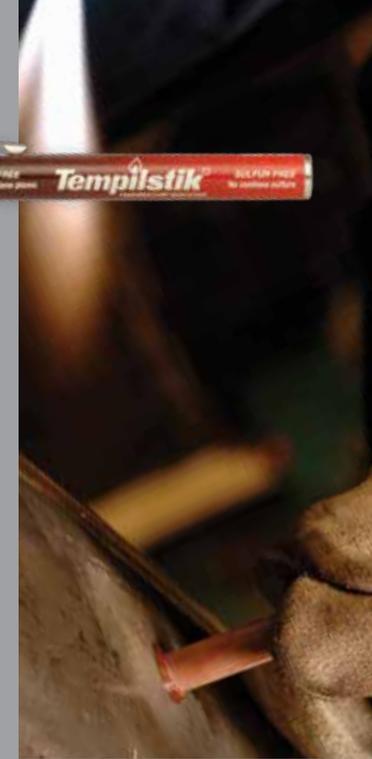
28000	38 °C / 100 °F
28002	43 °C / 109 °F
28004	48 °C / 119 °F
28005	52 °C / 125 °F
28006	66 °C / 150 °F
28007	73 °C / 163 °F
28008	76 °C / 169 °F
28009	79 °C / 175 °F
28010	83 °C / 182 °F
28011	87 °C / 188 °F
28012	93 °C / 200 °F
28013	97 °C / 206 °F
28014	101 °C / 213 °F
28015	104 °C / 219 °F
28016	107 °C / 225 °F
28019	121 °C / 250 °F
28020	124 °C / 256 °F
28021	128 °C / 263 °F
28022	132 °C / 269 °F
28023	135 °C / 275 °F
28024	142 °C / 288 °F
28025	146 °C / 294 °F
28026	149 °C / 300 °F
28027	152 °C / 306 °F
28028	156 °C / 313 °F
28029	163 °C / 325 °F
28030	173 °C / 344 °F
28031	177 °C / 350 °F
28032	184 °C / 363 °F
28033	191 °C / 375 °F
28034	198 °C / 388 °F

28035	204 °C / 400 °F
28036	212 °C / 413 °F
28037	218 °C / 425 °F
28039	232 °C / 450 °F
28040	239 °C / 463 °F
28041	246 °C / 475 °F
28042	253 °C / 488 °F
28043	260 °C / 500 °F
28044	274 °C / 525 °F
28045	288 °C / 550 °F
28046	302 °C / 575 °F
28047	316 °C / 600 °F
28048	343 °C / 650 °F
28049	371 °C / 700 °F
28050	399 °C / 750 °F
28051	427 °C / 800 °F
28052	454 °C / 850 °F
28053	482 °C / 900 °F
28055	510 °C / 950 °F
28056	538 °C / 1000 °F
28057	550 °C / 1022 °F
28058	566 °C / 1050 °F
28059	593 °C / 1100 °F
28060	621 °C / 1150 °F
28061	649 °C / 1200 °F
28062	677 °C / 1250 °F
28063	704 °C / 1300 °F
28064	760 °C / 1400 °F
28065	788 °C / 1450 °F
28066	816 °C / 1500 °F
28067	843 °C / 1550 °F

Tempilstik® Celsius Temp

28300	40 °C / 104 °F
28301	50 °C / 122 °F
28302	55 °C / 131 °F
28303	60 °C / 140 °F
28304	70 °C / 158 °F
28305	75 °C / 167 °F
28306	80 °C / 176 °F
28307	85 °C / 185 °F
28308	90 °C / 194 °F
28309	95 °C / 203 °F
28310	100 °C / 212 °F
28312	110 °C / 230 °F
28313	115 °C / 239 °F
28314	120 °C / 248 °F
28315	125 °C / 257 °F
28316	130 °C / 266 °F
28317	140 °C / 284 °F
28318	150 °C / 302 °F
28319	155 °C / 311 °F
28320	160 °C / 320 °F

28321	165 °C / 329 °F
28322	170 °C / 338 °F
28323	175 °C / 347 °F
28324	180 °C / 356 °F
28325	190 °C / 374 °F
28326	195 °C / 383 °F
28327	200 °C / 392 °F
28328	210 °C / 410 °F
28329	215 °C / 419 °F
28330	220 °C / 428 °F
28331	225 °C / 437 °F
28332	230 °C / 446 °F
28333	235 °C / 455 °F
28336	250 °C / 482 °F
28338	270 °C / 518 °F
28339	280 °C / 536 °F
28340	290 °C / 554 °F
28341	300 °C / 572 °F
28342	320 °C / 608 °F
28343	350 °C / 662 °F
28345	400 °C / 752 °F
28347	460 °C / 860 °F
28349	500 °C / 932 °F
28350	560 °C / 1040 °F
28351	600 °C / 1112 °F
28352	625 °C / 1157 °F
28355	700 °C / 1292 °F



**Details**

28600 Test Kit including :

52°C	66°C	79°C	93°C
107°C	121°C	135°C	149°C
163°C	177°C	191°C	204°C
218°C	232°C	246°C	260°C
288°C	316°C	371°C	427°C

TEMPSTIK® TEST KIT

Tailor-made for welding inspectors, instructors and supervisors, Tempilstick® Test Kit is an essential, one-stop tool that provides you with all the information needed for determining the proper temperatures for welding, heat treating, soldering, brazing and other operations involved in the fabrication of most metals.

Features & Benefits

- 20 Tempilstick® indicators between 52 °C (125 °F) 427 °C (-800 °F)
- Stick melts at designated temperature for easy and immediate visual inspection with +/-1% accuracy.
- Includes Preheating and Basic Guide to Ferrous Metallurgy charts for quick reference of critical temperatures

Industry Uses

Surface preheating
Welding and metal fabrication
Annealing
Stress relieving
Interpass monitoring and controlling
Post-weld surface heating
Machine and equipment operations

Surface Uses

Steel
Iron
Aluminium
Stainless steel
Glass
Plastic
Ceramic

**Details**

24200	IRT16
24203	ISO/CEI 17011-EA-IAF certified IRT16
24202	K-Probe Thermocouple

IRT-16

The IRT-16 is engineered to provide instant, superior accuracy and consistency in surface temperature measurement for a wide range of applications. The lightweight and compact design of the IRT-16 makes temperature measurement on hard-to-reach surface convenient and efficient.

Features & Benefits

- Temperature measurement range between -60 °C (-76 °F) and 625 °C (1157 °F) with read-out accuracy of +/- 2%
- Laser pointer with sensitive 16:1 distance to spot ratio for improved accuracy.
- Four-digit backlit dual display ideal for low-light areas
- °C or °F selectable readout
- Min/Max/Avg and differential temperature mode available

- Built-in jack for K-Type thermocouple probe to allow direct contact measurement
- NIST certified units available

Industry Uses

Preventive Maintenance
Industrial Manufacturing
Metal Production
Glass Production
Calibrating industrial ovens
HVAC/R

Surface Uses

Metals
Plastics
Glass
Rubber
Wood
Ceramic
Concrete and Stone

**Details**

24290	Estik™
24253	ISO/CEI 17011-EA-IAF certified Estik™
24252	Estik™ Thermocouple

ESTIK™

Incorporated with the latest micro-thermocouple technology and an advanced accuracy of +/- 2%, this patented Estik measures the surface temperature from 0 °C (32 °F) to 537 °C (999 °F). Specially engineered for fast and convenient monitoring, Estik improves accuracy by eliminating errors due to reflection and other surface conditions.

Features & Benefits

- Ergonomic hand grip with one button operation
- Instant measurement read-out
- Three-digit bright LED display
- Durable heat-resistant housing with rubberized grip
- °C or °F selectable readout

Industry Uses

Preventive Maintenance
Industrial Manufacturing
Quality Control
Metal Fabrication
Welding
Oil and Gas
HVAC/R

Surface Uses

Metals
Plastics
Glass
Rubber
Wood
Ceramic
Concrete and Stone





Tempilaq® Indicating coating is an efficient, convenient and affordable method to verify the achievement of a specific temperature on a wide range of surfaces under dynamic conditions. Easily painted on any surface, Tempilaq® leaves an irreversible mark that is optimal for heat-treating, preventive maintenance and any other temperature sensitive applications.

Features & Benefits

- Easy application with quick-dry formula on any surface
- Melts at designated temperature leaving a noticeably different mark
- Wide temperature range from 79 °C (175 °F) to 1038 °C (1900 °F)
- Excellent accuracy within +/- 1%
- Only use Tempilaq® Green Label Thinner to dilute or replace evaporated solvent

Industry Uses

- Heat-treating
- Preventive Maintenance
- Thermal mapping on multiple surfaces
- Annealing
- Industrial Manufacturing
- Metal Fabrication
- Glass Production
- Calibrating industrial ovens

Surface Uses

- Metals
- Plastics
- Glass
- Rubber

Details



Tempilaq® 2 Ounce (55 ml)

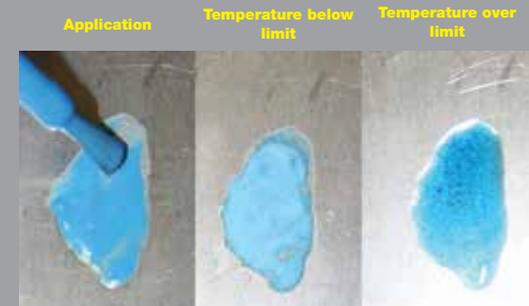
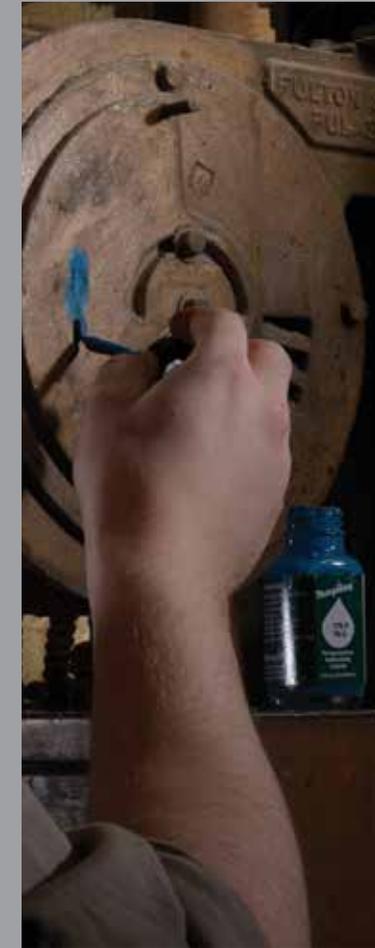
24400	79 °C /175 °F
24401	93 °C /200 °F
24402	107 °C /225 °F
24403	121 °C /250 °F
24404	135 °C /275 °F
24405	149 °C /300 °F
24406	156 °C /313 °F
24407	163 °C /325 °F
24408	177 °C /350 °F
24410	191 °C /375 °F
24411	204 °C /400 °F *
24412	218 °C /425 °F *
24413	232 °C /450 °F
24414	246 °C /475 °F
24416	260 °C /500 °F
24417	274 °C /525 °F
24418	288 °C /550 °F
24419	302 °C /575 °F
24420	316 °C /600 °F
24421	343 °C /650 °F
24422	371 °C /700 °F
24423	399 °C /750 °F
24424	427 °C /800 °F
24425	454 °C /850 °F
24426	482 °C /900 °F
24427	510 °C /950 °F
24428	538 °C /1000 °F
24429	550 °C /1022 °F
24430	566 °C /1050 °F
24431	593 °C /1100 °F
24432	621 °C /1150 °F
24433	649 °C /1200 °F
24434	677 °C /1250 °F
24435	704 °C /1300 °F
24436	760 °C /1400 °F
24438	816 °C /1500 °F
24439	871 °C /1600 °F
24440	927 °C /1700 °F

Tempilaq® Thinner

24597 Thinner 55 ml

Tempilaq® Quart (946 ml)

24554	191 °C /375 °F
24558	399 °C /750 °F
24560	454 °C /850 °F
24562	510 °C /950 °F
24564	566 °C /1050 °F
24565	593 °C /1100 °F
24566	621 °C /1150 °F
24567	649 °C /1200 °F



• See explanation on page 2

TEMPIL® TEMPERATURE SENSITIVE LABELS

TEMPERATURE MONITORING

Temperature indicating labels are an economical temperature indication solution that can be easily applied to almost any surface for later monitoring, making it ideal for preventative maintenance, logistics, quality control, manufacturing, and many other applications.

Monitor temperatures attained during:

- Shipping and storage : product integrity may depend on maintaining shipping and storage temperatures
- Process : manufacturing and other processes may depend on reaching or staying below certain temperatures
- Product use : product warranty may depend on maintaining certain temperatures
- Laboratory testing : testing procedures may depend on reaching or staying below certain temperatures

Industry Uses

Quality Control
Preventive Maintenance
Industrial Manufacturing
Metal Fabrication
Transportation
Calibration

Surface Uses

Metals
Plastics
Glass
Rubber



TEMPILABEL® REVERSIBLE (LIQUID CRYSTAL)

Providing users with a high level of flexibility, Tempilabel® reversible labels indicates accurate readings as the temperature fluctuates. Each label is equipped with seven specific temperature levels for easy identification and monitoring. Available in pack of 10 labels.

Features & Benefits

- Excellent accuracy of +/- 2% of the Fahrenheit rating
- LCD technology for real-time, accurate readings as temperature fluctuates
- Temperature range from 30 °C (86°F) to 90 °C (194°F)
- Calibration-free
- Oil, water and steam resistant

Details

Pack of 10

26901	°C	30	35	40	45	50	55	60
	°F	86	95	104	113	122	131	140
26903	°C	60	65	70	75	80	85	90
	°F	140	149	158	167	176	185	194



Size 13 x 44 mm

TEMPILABEL® SERIES 4



Four-Level, Irreversible Temperature Indicating Label Tempilabel® Series 4 labels are designed to deliver immediate, accurate and reliable readings for up to four temperatures in a variety of applications or environments. Tempilabels can be quickly affixed to almost any surface and used to quickly indicate when a precise temperature is reached. Available in pack of 10 labels, or in pack of 500 labels.

Details

Pack of 10

26700	°C	38	43	49	54
	°F	100	110	120	130
26701	°C	54	60	66	71
	°F	130	140	150	160
26702	°C	77	82	88	93
	°F	170	180	190	200
26703	°C	88	93	99	104
	°F	190	200	210	220
26705	°C	166	171	177	182
	°F	330	340	350	360

26706	°C	52	66	79	93
	°F	125	150	175	200
26707	°C	38	66	93	121
	°F	100	150	200	250
26708	°C	93	121	149	177
	°F	200	250	300	350

Roll of 500

26750	°C	38	43	49	54
	°F	100	110	120	130
26751	°C	77	82	88	93
	°F	170	180	190	200
26752	°C	93	121	149	177
	°F	200	250	300	350

Features & Benefits

- Four temperature readings per label for max/min applications
- Excellent accuracy to +/- 2% of the Fahrenheit rating
- Temperature range from 38 °C to 177 °C
- Permanent record for inspection and quality control
- Calibration-free
- Oil, water and steam resistant

Size 23 X 45 mm



TEMPILABEL® SERIES 21



Tempilabel® Series 21 labels are uniquely designed to deliver immediate, accurate and reliable readings in a variety of applications or environments. Tempilabels can be quickly affixed to almost any surface and used to quickly indicate when a precise temperature is reached. Available in pack of 210 labels, or in rolls of 1000 labels.

Details

Pack of 210	Roll of 1000						
26250	26275	°C 38	°F 100	26260	26284	°C 93	°F 200
26251	26276	°C 43	°F 110	26261	26285	°C 99	°F 210
26252	26277	°C 49	°F 120	26262	26286	°C 104	°F 220
26254	26278	°C 54	°F 130	26263	26287	°C 110	°F 230
26255	26279	°C 60	°F 140	26264	26295	°C 116	°F 240
26256	26280	°C 71	°F 160	26265	26288	°C 121	°F 250
26258	26282	°C 82	°F 180	26266	26289	°C 127	°F 260
26259	26283	°C 88	°F 190	26267	26290	°C 132	°F 270
				26268	26291	°C 138	°F 280

Features & Benefits

- Excellent accuracy to +/- 2% of the Fahrenheit rating
- Temperature range from 38 °C to 260 °C
- Permanent record for inspection and quality control
- Calibration-free
- Oil, water and steam resistant

Size 12 X 13 mm



HIGH TEMPERATURE COATINGS

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HIGH TEMPERATURE COATINGS

WELDABLE PRIMER AND HEAT-ABSORBING COATINGS

TEMPIL® has developed specific products where heat causes troubles, from protecting NASA's Space Shuttle Orbiter to solar panels.

TEMPIL® has also developed special weldable Primer to save time in the welding processes.



ANTI-HEAT®



Anti-Heat® is specially formulated to eliminate heat damage and discoloration on materials exposed to high temperatures. Engineered to absorb and dissipate the heat generated by welding, brazing, or soldering from traveling through the metal surface, Anti-Heat® efficiently stops heat related damages such as buckling, cracking, warping or other metal distortions from occurring.

Features & Benefits

- Prevents heat migration through metal surfaces
- Non-toxic & Non-hazardous
- Asbestos-free and odorless
- Adheres to horizontal, vertical and overhead surface

Industry Uses

Welding
Metal fabrication and construction
Ship building and repair

Surface Uses

Metals
Plastic
Glass

Details



24003 Anti-Heat tube 355 ml (12 oz.)



BLOXIDE®



Bloxide® is a versatile weldable primer with a unique aluminum-based formula that eliminates cleaning or removal before welding, thus saving time and labor costs. Enhanced by corrosion preventative features, Bloxide® can be applied to a wide range of metals for extended periods of storage, assisting in producing X-Ray quality welds.

Features & Benefits

- High temperature resistant to 427 °C (800 °F)
- Can be sprayed, brushed or parts can be dipped into it

Industry Uses

Welding
Metal fabrication
Oil & Gas
Pipeline Transmission
Ship Building
Pre-Fabrication

Details



24100 Bloxide 3,79L (1 Gallon)



24104 Bloxide 355 ml Aerosol



Surface Uses

Steel
Iron
Aluminium
Stainless steel

PYROMARK®



Pyromark® is a specially formulated coating for metal surfaces intended for high heat exposure. The silicone based coating provides long-lasting protection against oxidation and corrosion. Ideal for solar energy or any application that requires efficient heat transfer, the flat black formula is engineered with solar absorptivity of 0.95, which makes Pyromark® an almost perfect black box absorber.

Features & Benefits

- Pyromark® 1200 withstands 538 °C (1000 °F)
- Pyromark® 2500 withstands 1093 °C (2000 °F)
- Improves heat transfer in infra-red heating applications due to high emissivity properties.
- Solar absorptivity of 0.95 is an ideal black box absorber.

Industry Uses

Solar Energy
Broilers/Furnaces
Ovens/Fireplace Accessories
Mufflers/boat and auto engines
Radiators/Stoves

Surface Uses

Iron
Steel
Pipes & Tubes
Ceramic
Brick/Stone

Details



25002 Pyromark® 1200 Flat Black 3,79L

25010 Pyromark® 2500 Flat Black 3,79L



INDUSTRIAL MAINTENANCE PRODUCTS



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INDUSTRIAL MAINTENANCE PRODUCTS

MRO AND PVF CHEMICALS

Our LA-CO® brand of high quality, high-performance MRO, plumbing and HVAC chemicals is a globally trusted partner for professional contractors and maintenance departments. We are committed to serving several industries including plumbing, HVAC, pipefitting, maintenance operations, repair services and original equipment manufacturing...

MT.0994



MT.0994 is 400 ml high quality, fast-drying lacquer with colour match according to RAL international standard. Engineered for industrial use on metal or wood surfaces, this spray paint provides superior opacity, corrosion protection, and is weather- and fade-resistant for indoor or outdoor applications.

Features & Benefits

- Fast-drying and opaque formula allows for single-coat coverage, saving cost and time
- Available in 33 color options that match according to the RAL international standard, ideal for touch-up and repair
- Wear-, weather-, and UV-resistant paint formula provides strong adhesion for long-lasting coverage
- MT.0994 withstands 110 °C (230 °F)
- The RAL-matched, painted can neck allows for easy identification of internal paint color, even with misplaced caps

Industry Uses

Industrial manufacturing
Metal fabrication
Construction
Welding
Shipping supply
Ship building and repair
Oil and gas
Military
Machining shops

Surface Uses

Steel and iron
Plastic
Wood
Aluminum
Glass

Details



RAL

● 47101003	1003	Signal Yellow	● 47105017	5017	Traffic blue
● 47101013	1013	Oyster White	● 47106001	6001	Emerald green
● 47101015	1015	Light ivory	● 47106005	6005	Moss green
● 47101018	1018	Zinc yellow	● 47106010	6010	Grass Green
● 47101021	1021	Rape yellow	● 47106011	6011	Reseda green
● 47101023	1023	Traffic yellow	● 47106018	6018	Yellow Green
● 47103000	3000	Flame red	● 47107016	7016	Anthracite grey
● 47103001	3001	Signal red	● 47107032	7032	Pebble grey
● 47103003	3003	Ruby red	● 47107035	7035	Light grey
● 47103020	3020	Traffic red	● 47109005	9005	Jet black glossy
● 47104003	4003	Heather violet	● 47100106	9005	Jet black flat
● 47104006	4006	Traffic purple	● 47109006	9006	White aluminium
● 47105005	5005	Signal Blue	● 47109010	9010	Pure white glossy
● 47105010	5010	Gentian blue	● 47100101	9010	Pure white flat
● 47105012	5012	Light blue	● 47109016	9016	Traffic white
● 47105015	5015	Sky blue			



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INDUSTRIAL MAINTENANCE PRODUCTS

The RAL colors in this chart have been matched as closely as possible. This chart can not serve as a standard for RAL color products. Use official RAL color product for most accurate color.

REGULAR FLUX PASTE



LA-CO Regular Flux is a water soluble flux that meets industry standard ASTM B813. With NSF and UPC approvals, this all-weather flux is the ultimate flux for all copper soldering.

Features & Benefits

- Water-soluble paste won't leave residue in water piping
- Meets industry standard ASTM B813 and contains no zinc chloride to reduce corrosion concerns.
- Non-acid, non-toxic, and lead-free to eliminate safety concerns
- Cleans pipe upon application, allowing solder to run more smoothly around the pipe
- All-weather formula for use in hot and cold climates

For use on/with

All lead-free and common soft solders
Copper
Brass
Galvanized iron
Lead
Zinc
Tin
Silver
Nickel
Mild steel
Terne plate
Malleable iron

Approvals/Certifications

ASTM B813
NSF 61
UPC
Mil. Spec. Mil-F-4995 Type II

Details



22101	59 ml (2 oz.)
22104	118 ml (4 oz.)
22194	Brush In Cap 118 ml (4oz.)



22107	453 ml
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Flux M-A



Developed for fast fluxing action on stainless steel, M-A Flux is excellent for projects on stainless gutters and roofs, among many other applications. It contains no zinc chloride and it will not cause progressive corrosion on stainless pipe. There is no neutralizing necessary when using it to solder stainless steel.

Features & Benefits

- Fast fluxing action for stainless steel and chrome
- Contains no heavy metal chlorides, preventing potential flux damage
- DO NOT USE ON POTABLE WATER TUBING

Approvals/Certifications

Fed. Spec. Commercial Item
Description A-A-51145C, Type 11B
ASTM B32: Type 1S

For use on/with

All types of soft solders
Stainless steel
Chrome
Copper
Galvanized iron
Lead
Brass

Details



23913 946 ml / 1qt



Aluminium Flux Paste



Low-temperature soldering prevents aluminum components from melting. New aluminum HVAC components will not stall job completion. Resists electrolytic action between aluminum and copper, preventing leakage between dissimilar metals.

Features & Benefits

- Fast fluxing action for stainless steel and chrome
- Contains no heavy metal chlorides, preventing potential flux damage
- DO NOT USE ON POTABLE WATER TUBING

Approvals/Certifications

DOD Std. 1866

For use on/with

Tin-silver solder
96/4 solder
94/6 solder
95/5 solder
60/40 solder
40/60 solder
50/50 solder

Details



22407 454 g / 1lb



Bloc-it®



This heat absorbing paste has been time tested for protecting materials from heat damage. Typical uses include soldering on ball, dielectric, and solenoid valve components. BLOC-IT prevents metal distortion and protects painted or finished surfaces from adjacent soldering, brazing, or welding.

Features & Benefits

- Absorbs heat effectively, protecting adjoining surfaces from heat damage
- Safe, non-toxic, no asbestos, harmless to skin, and odorless
- Easy application and cleanup; non-staining

For use on/with

New construction and piping installation
Valve installation and repair
Welding

Details



11511 283 g / 10 oz



Cool Gel®



Features & Benefits

- Protects lead free valves during soldering
- Reduces the threat of costly heat damage to rubber seals and gaskets
- Protects components and materials during soldering to avoid heat damage
- Protects painted and finished surfaces from discoloration due to torch heat
- Unique gelled formula sticks to surfaces without dripping or running off
- Clear, non-staining gel leaves no residue, eliminating cleanup
- Safe, non-toxic, harmless to skin, and odorless

For use on/with

Metal
Plastics
Valves
Insulation
Drywall and studs
Wood



Details

11513 473 ml (1 pt.)



11509 946 ml (1 qt.)



Slic-tite® Paste, Stik, Tape with PTFE Thread Sealant

Specially formulated with PTFE for added sealing power, Slic-tite® is the premium thread sealant paste. It has been successfully used for decades to seal water, air, steam, natural gas, and more. It removes easily from skin and clothing. Slic-tite thread sealant works in extremely high pressure systems, and it comes with several approvals so that the job is completed to code.

Features & Benefits

- Contains PTFE for greater sealing power
- Safe, non-toxic, non-drying
- Washes off hands and clothes easily; less time spent cleaning up
- Do not use on oxygen service; use Oxytite Paste or Slic-tite PTFE Tape
- Paste : Can be used on variety of metals and plastic, so you only need one thread sealant for many types of jobs
- Stik : High-performance thread compound in handy stick form
- Tape : 4 mils thick and made with PTFE for greater sealing power

		PASTE		STIK		TAPE	
		PSI	BAR	PSI	BAR	PSI	BAR
Pressure	Liquid	10.000	680	5.000	340	2.000	136
	Gas	3.000	204	500	34	2.000	136
Sealing Temp.	°C	-46°C to 260°C		-46°C to 177°C		-268°C to 288°C	
	°F	-50 °F to 500 °F		-50 °F to 350 °F		-450 °F to 550 °F	

For use on/with

Metal
PVC
CPVC
ABS

Approvals/Certifications

USDA approved for use in federally inspected meat and poultry plants
UL
CSA
NSF
UPC
FBC™ system compatible indicates that this product has been tested, and is monitored on an ongoing basis, to assure its chemical compatibility with FlowGuard Gold®, BlazeMaster® and Corzan® pipe and fittings.



Details

Brush In Cap bottle

42009 118 ml (1/4 pt.) BIC
42019 236 ml (1/2 pt.) BIC
42029 473 ml (1 pt.) BIC

Stik

41600 Stik 45g / 1 1/4 oz

Tape

44082 ● 0,64 x 62 cm (1/2"x300")
44083 ● 1,27 x 1524 cm (1/2"x600")
44084 ● 1,27 x 3048 cm (1/2"x1200")
44085 ● 1,9 x 762 cm (3/4"x300")
44086 ● 1,9 x 1524 cm (3/4"x600")
44094 ● 1,27 x 660 cm (1/2"x260")
44095 ● 1,27 x 660 cm (1/2"x260")

LEAK-TITE® Blue Thread Sealant

This blue sealant is excellent for sealing water, air, steam, natural gas, refrigerants, gasoline and ammonia. LEAK-TITE® Blue is also ideal for use on production lines and fabrication shops.

Features & Benefits

- Pressures: 102 BAR (1,500 PSI) for gas; 340 BAR (5,000 PSI) for liquid
- Sealing temperature: -46 °C to 260 °C (-50 °F to 500 °F)
- Contains PTFE particles for greater sealing power
- Will not harden or dry out over time, remains flexible for easy disassembly
- Safe, non-toxic, contains no solvents
- Washes off hands and clothes easily; less time spent cleaning up
- Do not use on oxygen service; use Oxytite Paste or Slic-tite® PTFE Tape

For use on/with

Metal
PVC
CPVC
ABS

Approvals/Certifications

NSF
FBC™ system compatible indicates that this product has been tested, and is monitored on an ongoing basis, to assure its chemical compatibility with FlowGuard Gold®, BlazeMaster® and Corzan® pipe and fittings. FBC™, FlowGuard Gold®, BlazeMaster® and Corzan® are licensed trademarks of The Lubrizol Corporation

Details

Brush In Cap bottle

46009 118 ml (1/4 pt.) BIC

BIC = Brush in Cap





Details 
42805 113g / 4 oz

Oxytite



Oxygen piping systems need a specially formulated thread sealant, and OXY-TITE is the perfect product for these sensitive systems. Each batch of OXY-TITE is tested to the stringent standard of ASTM G-72.

Features & Benefits

- PTFE thread sealant specifically formulated for oxygen services
- Pressures: 2,600 PSI (180 BAR) for oxygen gas
- Sealing temperature: -320°F to 450°F (-196°C to 232°C)
- No V.O.C.'s

Approvals/Certifications

ASTM G-72

For use on/with

Oxygen piping systems



Details 
49050 50ml
49250 250ml 

La-Co LOC



Designed to harden and seal in the absence of oxygen, LA-CO LOC Anaerobic Thread Sealant is excellent for heavy vibration areas such as fire sprinkler systems, compressors, and reciprocating equipment.

Features & Benefits

- Pressures: 3,000 PSI (204 BAR) for gas; 10,000 PSI (680 BAR) for liquid
- Sealing temperature: -65°F to 400°F (-54°C to 204°C)
- Contains PTFE for a positive seal
- Anaerobic adhesive provides locking power
- Contains no solvents that may shrink and weaken seal
- Ideal for threads in heavy vibration areas
- DO NOT USE ON OXYGEN SERVICE; USE OXYTITE PASTE OR SLIC-TITE PTFE TAPE
- Made in USA with globally sourced materials



Oil Marker



Features & Benefits

- Chisel tip marker for exact delivery to the contact avoiding drips and wiping
- Eliminates humidity: on electric or electronic circuits and contacts
- Cleans and leaves protective lubricant in one easy step
- Silicone free, safe on metals and plastics
- Offers protection from oxydation and corrosion while improving contact and conductivity

For use on/with

Bearings
Rotating parts
Electronic cards
Weapons
Bolts
Metal hinges
Adhesives

Details

31100001  

Display  

199011 (x 32)



Precision Spout Oiler



Features & Benefits

- Special telescoping spout lubricates hard-to-reach areas up to 17,78 cm (7") away
- Premium grade, turbine grade oil is excellent for all general purpose lubricating

For use on/with

Rotating and reciprocating equipment
Bearings
Motors
Slides

Details

79704  

118 ml (4 fl. oz.)



Lubri-Joint®



Features & Benefits

- FBC™ System Compatible
- Ideal for lubricating rubber gaskets, promoting proper expansion, and ensuring correct fit
- Suitable for all types of pipelines, including PVC and soil pipe, so only one brand of gasket lubricant is needed
- Non-bacterial, non-petroleum, no objectionable odor
- Can be applied to wet or dry surfaces, making preparation easy
- Will not deteriorate natural or synthetic rubber, plastic gasket, or cast iron pipe

Approvals/Certifications

FBC™ System Compatible indicates that this product has been tested, and is monitored on an ongoing basis, to assure its chemical compatibility with FlowGuard Gold®, BlazeMaster® and Corzan® pipe and fittings. FBC™, FlowGuard Gold®, BlazeMaster® and Corzan® are licensed trademarks of The Lubrizol Corporation.

For use on/with

Rubber Gaskets

Details

78713 

946 ml / 1qt



Visu-Glow



Features & Benefits

- Leak detector formulated with a high viscosity so it can be used on vertical surfaces.
- Temperature range: 15°F to 200°F (-9°C to 93°C)
- Built-in dauber allow for easy application
- Highly visible fluorescent color shows brightly, even in dimly lit places
- Non-corrosive, non-toxic, safe for oxygen

For use on/with

CSST systems
Gas line connections

Details

32898 

240 ml / 8 fl. Oz





For use on pipes, aluminum and other metals. Heat the sealing substance or solder tubing. Avoid use on metal, glass and ceramics. For use with all refrigerants. Removes dirt, grease, oil, air, steam and water. Adheres to 450 PSI (31 BAR) temp to 350°F (177°C). Heat the seal with torch flame. Do not touch. To make repair in 90 seconds. See YouTube video.

Details

11575 Stik

**HEAT-SEAL STIK®**

Refrigeration coils are prone to pinhole leaks and hairline cracks. Heat-Seal Stik was specifically made to seal these small holes for an immediate fix, even if the appliance will need to be replaced eventually. Heat-Seal Stik works with heat - no mixing of epoxy compounds necessary.

Features & Benefits

- Sealing temperature: up to 350°F (177°C)
- Pressure: to 600 PSI (41 BAR)
- Repair pinhole leaks and get refrigeration system running again without having to replace an entire appliance
- No mixing of epoxy compounds, heat activation saves time on the job
- Fast repairs completed in 90 seconds

For use on/with

Refrigeration systems
R-410A systems and more

**Details**

19571 Stik

**EPOXY-STIK®**

Water system leaks and cracks can be easily sealed with the Epoxy-Stik. Safe on potable water systems, this epoxy hardens in 5-10 minutes. Simply remove the protective wrapping and mix the two compounds together.

Features & Benefits

- Withstands temperatures up to 250°F (121°C)
- Hardens in 5-10 minutes and cures fully in 24 hours, enabling the system to be up and running again in no time
- Can be applied under water for submerged pipe leaks
- After one hour can be drilled, tapped, filed, sawed, sanded, and painted - allowing the job to be easily finished in little time

Approvals/Certifications

NSF

For use on/with

Water systems
Potable water systems

**Details**

11475 Stik

**Oyltite-Stik™**

For fast temporary repair on small engine leaks, use Oyltite-Stik. It stops oil and gasoline leaks without the need for equipment draining. Use Oyltite-Stik on low-pressure gas tanks, oil tanks, and more.

Features & Benefits

- Pressure to 15 PSI (1 BAR)
- Stops leaks fast for temporary repair of oil and gasoline leaks
- Apply directly to the fuel tank without draining, less time is spent stopping the leak

For use on/with

Gasoline tanks
Fuel oil tanks
Transmissions and oil-filled transformers

Approvals/Certifications

U.S. Fed. Stock No. 8030-935-5841



Plasto-Joint Stik®

Features & Benefits

- Plastic thread sealant in a stick
- Designed for superior sealing of plastic pipe threads, ideal for pool and spa installation
- Easily fits inside a shirt pocket for convenient mobility
- Pressures: 300 PSI (20 BAR) for gas; 500 PSI (34 BAR) for liquid
- Sealing temperature: up to 250°F (121°C)
- DO NOT USE ON OXYGEN SERVICE; USE OXYTITE PASTE OR SLIC-TITE PTFE TAPE

For use on/with

ABS
PVC
CPVC

Approvals/Certifications

UPC

Details 
11775 35 g / 1¼ oz



T-O-T®

Features & Benefits

- Economical pipe thread sealant great for sealing metal threads on many types of systems
- Pressures: 350 PSI (24 BAR) for gas; 500 PSI (34 BAR) for liquid
- Sealing temperature: up to 350°F (177°C)
- No-drip siliconized formula for fast application on metal threads
- Lead-free, non-toxic, no V.O.C.'s
- DO NOT USE ON OXYGEN SERVICE; USE OXYTITE PASTE OR SLIC-TITE PTFE TAPE

For use on/with

Metal

Approvals/Certifications

NSF
UPC

Details 
Dozen Display Box
12219 236 ml / 1/2 pt



Pipetite® STIK

Features & Benefits

- Efficient way to seal pipe
- Easily fits inside a shirt pocket for convenient mobility.
- Pressures: 350 PSI (24 BAR) for gas; 2,000 PSI (136 BAR) for liquid
- Sealing temperature: up to 350°F (177°C)
- Safe, non-toxic, non-drying
- DO NOT USE ON OXYGEN SERVICE; USE OXYTITE PASTE OR SLIC-TITE PTFE TAPE

For use on/with

Metal

Approvals/Certifications

NSF
UPC
UL

Details 
11175 35 g / 1¼ oz


11176 113 g / 4 oz



Pipetite® Paste

Features & Benefits

- Economical pipe thread sealant great for sealing metal threads on many types of systems.
- Pressures: 2,600 PSI (177 BAR) for gas; 5,000 PSI (340 BAR) for liquid
- Sealing temperature: up to 400°F (204°C)
- No V.O.C.'s
- DO NOT USE ON OXYGEN SERVICE; USE OXYTITE PASTE OR SLIC-TITE PTFE TAPE

For use on/with

Metal

Approvals/Certifications

CSA
UPC
UL

Details 
12109 118 ml / 1/4 pt
12110 236 ml / 1/2 pt



**Details**

08907 453 g (16 oz) BIC
08910 283 g (10 oz) BIC

BIC = Brush in Cap

EZ BREAK® Copper Anti-Seize



Equipment vulnerable to galling and rust needs protection. The best way to protect your equipment from seizing and corrosion is to use EZ Break® Anti-Seize. Simply apply EZ Break® to nuts, bolts, and other metal parts, and your equipment will be rust free and easy to maintain.

Features & Benefits

- Working temperature: to 982 °C (1800° F)
- Lubricates and protects nuts and bolts, making disassembly easy, even after years of service
- Resists galling, rust and corrosion so your metal parts won't "freeze up"
- Copper material is easy to use in most general applications

Approvals/Certifications

Meets Mil-PRF-907F
Authorized by USDA for use in federally inspected meat and poultry plants

Surface Uses

Nuts
Bolts
Valves
Flanges
Splines

**Details**

08971 226 g (8 oz) BIC
08972 453 g (16 oz) BIC

BIC = Brush in Cap

EZ BREAK® Nickel Anti-seize



Equipment vulnerable to galling and rust needs protection. The best way to protect your equipment from seizing and corrosion is to use EZ Break® Anti-Seize. Simply apply EZ Break® to nuts, bolts, and other metal parts, and your equipment will be rust free and easy to maintain.

Features & Benefits

- Working temperature: to 1427 °C (2600° F)
- Lubricates and protects nuts and bolts, making disassembly easy, even after years of service
- Resists galling, rust and corrosion so your metal parts won't "freeze up"
- Nickel material is excellent for ultra-high temperature applications

Surface Uses

Nuts
Bolts
Valves
Flanges
Splines

RIGHT
FOR THE
JOB.

Like any other tool, markers and temperature indication products are specialized to help professionals do the jobs they need to do. As the industry's leader in these categories, we continuously invests in research and development to meet the requirements of a constantly changing and advancing marketplace. Through careful product evaluation and analysis, our chemists create proprietary formulas, which are designed to meet the needs of our customers.

We are very proud to introduce our 2018 new products improving our range and helping users to do their jobs better, faster, and smarter than ever before.



With over 80 years of marking expertise, the industry's leader is available 24/7 to help. Whether on your phone, tablet, or computer, the new Markal.com is the ultimate resource for product information, pictures, videos, and technical data.

Finding the right marker has never been easier.

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