COATING & MARKING PRODUCTS

FOR

TIRE and RUBBER

MANUFACTURING

APV®
ENGINEERED COATINGS

APV® ENGINEERED COATINGS

Any color so long as it is black

Henry Ford

In 1912, Ford Motor Company approached Akron Varnish Works for a solution to the bottle neck in their Model-T assembly process- the paint took too long to dry. We supplied Ford with an ultra fast drying enamel called Black Japan, which allowed them to dramatically increase production speed. After our success, we expanded our offerings to bicycle and automotive manufacturers and prospered through The Great Depression.

A focused partner in advanced coating, chemical & manufacturing solutions...

APV offers a complete line of coating and marking products engineered specifically for tire and rubber manufacturers. All products boast outstanding performance properties and have been utilized by leading tire producers world-wide.

As compliance experts, APV offers low VOC, VOC-free, HAPS-free, and water-based formulations to meet REACH, EPA, and other enviromental standards.

Our R&D team will custom-formulate products to meet unique applications and performance criteria.

Our Engineering Team designs and installs custom and retrofitted equipment for production lines to improve efficiencies and streamline the application process.

1. STRIPING INKS
2. MARKING INKS
3. INSPECTION MARKERS
4. INDUSTRIAL CRAYONS
5. LUBRICANT COATINGS
6. CEMENTS
7. TIRE PAINTS
8. DECALS & GRAPHICS

STRIPING INKS

Water-based Striping Inks

Product Code: TB, TC, TD Series

This is a water-based line of inks used for coding and identification. TB and TC Inks are used on external rubber surfaces. Typical applications include: uncured treads, tubes, and hoses. These striping inks are available in both high viscosity (TB and TD-series) and low viscosity (TC-series) chemistries to accommodate multiple application processes. TB and TD Inks are gravity fed through a Beugler Wheel System® and can be ordered in 8 oz. bead marker bottles, quarts, and gallon containers. TC Inks are applied with a pressurized syringe or capillary tube and packaged in gallon containers or five gallon pails.

Colors:

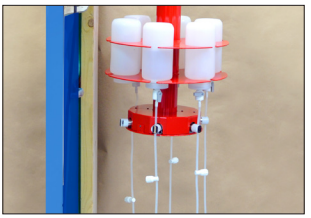
TB-1267 White
TB-2326 Red
TB-2666 Pink
TB-2712 Brown
TB-3570 Orange
TB-4222 Yellow
TB-5141 Green
TB-6353 Blue
TB-7220 Lavender

TC-1538 White
TC-2517 Red
TC-2524 Pink
TC-2528 Brown
TC-3512 Orange
TC-4537 Yellow
TC-5546 Green
TC-6530 Blue
TC-7529 Lavender

NEW! Now in brighter colors!

TD-1540 White
TD-2575 Pink
TD-2634 Red
TD-2636 Brown
TD-3492 Orange
TD-4315 Yellow
TD-5578 Green
TD-6555 Blue
TD-7635 Lavender

Capillary gravity feed system



Beugler wheel system for DH, DMH, TH, and TB inks

FEATURES

Excellent Adhesion to Rubber
No Mold Fouling
Water-based
Wide Range of Colors Available
Does Not Foul Molds
Easy to Use and Implement
High Solid Content
Non-Flammable
HAPS Free
Limited Odor
Contains No VOCs/COVs
Custom Colors Available

Wide Range of Colors Available
Excellent Adhesion to Rubber
Co-Curable
Does Not Foul Molds

HAPS Free
Easy to Use and Implement
Vibrant and Bright Stripes
Custom Colors Available

FEATURES

Solvent-based Striping Inks

Product Code: DH, DL, DM, and DMH Series

This is a solvent-based line of inks used for coding and identification. DH and DL Inks are co-curable and used on external rubber surfaces. Typical applications include: uncured treads, tubes, and hoses. These striping inks available in both high viscosity (DH, DM and DMH-series) and low viscosity (DL-series) chemistries to accommodate multiple application processes. Like the TH series, DH and DMH Inks are gravity fed through a Beugler Wheel System® and DM Inks are pressure fed through a Beugler Wheel System®. These products can be ordered in 8 oz. bead marker bottles, quarts, and gallon containers. DL Inks are applied with a pressurized syringe or capillary tube and packaged in gallon containers or five gallon pails.

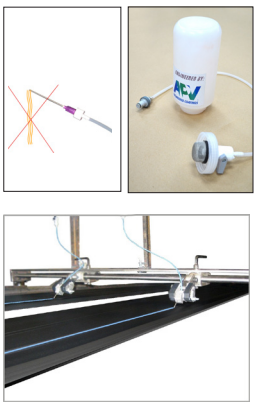
Colors:

DH-1611 White
DH-2330 New Red
DH-2570 Red
DH-2944 Pink
DH-2834 Brown
DH-3676 Orange
DH-4313 New Yellow
DH-4912 Yellow
DH-5675 Green
DH-6677 Blue
DH-6688 Light Blue
DH-7678 Lavender
DH-8016 Gray

DL-1858 White
DL-2925 Red
DL-2832 Pink
DL-2952 Brown
DL-3948 Orange
DL-4952 Yellow
DL-5924 Green
DL-6009 Blue
DL-7897 Lavender
DL-8075 Gray

DMH-1603 White
DMH-2173 Red
DMH-2758 Pink
DMH-3642 Orange
DMH-4551 Yellow
DMH-5643 Green
DMH-6641 Blue

DM-2640 Pink
DM-3641 Orange
DM-4550 Yellow
DM-5642 Green
DM-6639 Blue



Pressurized capillary system application for DL and TC inks

MARKING INKS

Water-based Defect Marking Ink

Product Code: DH-Series, TA-Series

Defect Marking Ink is used on internal or external rubber surfaces of tire components where a defect requires attention, as well as for harmonic and conicity markings during uniformity testing. The product is applied by conventional spray or with an 8 oz plastic bottle with an applicator nozzle for an easy and controlled application.

Water-based Bead Marking Ink

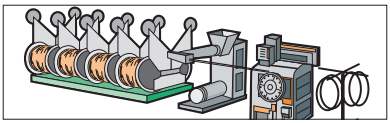
Product Code: TA Series

This is a water-based line of inks used to code and identify uncured bead rings during the bead assembling process. Bead Marking Inks are co-curable and have excellent adhesion to internal surfaces. Manufacturers can also use this product to mark plies or other green rubber components. Bead Marking Inks are packaged in 8 oz. bottles with an applicator nozzle for an easy and controlled application.

Colors:

TA-1120 White
TA-2120 Red
TA-3120 Orange
TA-4120 Yellow
TA-5120 Green
TA-6104 Blue

Manually applied with marking plastic bottles and nozzles.



Bead Assembling

FEATURES

Excellent Adhesion
Fast Drying on Hot Surfaces
For Internal Use
Easy Application
Non-Hazardous
Industry Proven
Non-Flammable
Wide Range of Colors Available
Contains No VOCs

Water-removable
Variety of colors

Easy to Apply
For External Use

FEATURES

Solvent-based Stamping Ink

Product Code: D-1091

Stamping Ink is a white ink used on external surfaces, such as sidewalls, for inventory recording purposes. The product is applied by a rubber stamper and can be easily removed with a damp cloth.

Colors:

D-1091 Bright White
D-4193 Yellow
D-6809 Blue

Jet Printing Ink

waterbased

Product Code:

These inks are use for alpha-numeric identification and inventory labeling on internal or external rubber components. Jet Printing Inks are available in water or solvent-based chemistries and applied via DOD (drop on demand) printers. This product was engineered specifically for the REA JET® Large Character Ink Jet Printer System. Jet Printing Inks can be applied during various steps of the tire production process, including: compound mixing, calendaring, tread extrusion, and final finish.

FEATURES

Excellent Adhesion
Does Not Foul Molds
Produces Clean, Crisp Dots
High Hiding

Easy to Implement
Fast Drying
HAPS-free

INSPECTION MARKERS

Water-based Dot Markers

Product Code: T Series

This is a water-based marking tool used to denote high point, conicity, and pass/fail marks during the tire uniformity inspection stage in tire production. Dot Markers contain water-removable inks and are packaged in marker containers for an easy and controlled application. This product is offered in three sizes for varying diameter dots. Dot Markers can be applied by hand or installed in a balancing or uniformity machine. The typical number of dots produced from a standard size marker (10-13mm.) is approximately 5,000 ± 10%.

Colors:

T-1608 White (standard/ small)
T-2587 Red (standard/ small/ XL)
T-2734 Pink (standard/ small)
T-3594 Orange (standard/ small)
T-4595 Yellow (standard/ small)
T-5736 Light Green (standard/ small)
T-5596 Green (standard/ small)
T-5865 Green (standard/ XL)
T-6612 Blue (standard/ small/ XL)
T-7732 Lavender (standard/ small)

Sizes:

Small Size= 5-8 mm.
Standard Size= 10-13mm.
Extra Large Size= 18-23mm.

FEATURES

Pocket-Sized
Easy to Use
Aids with Synchronization
Aids with Process Verification
Removable with Water
HAPS-free
Contains No VOCs

Wide Range of Colors Available
Pocket-Sized
Easy to Use
Aids with Synchronization
Aids with Process Verification
Removable with Water

FEATURES

Solvent-based Dot Markers

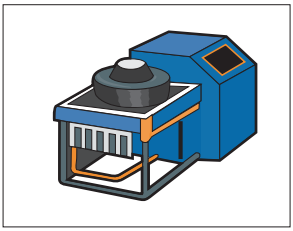
Product Code: D Series

This is a solvent-based marking tool used to denote high point, conicity, and pass/fail marks during the tire uniformity inspection stage in tire production. Dot Markers contain water-removable inks and are packaged in marker containers for an easy and controlled application. This product is offered in three sizes for varying diameter dots. Dot Markers can be applied by hand or installed in a balancing/uniformity machine. The typical number of dots produced from a standard size marker (10-13mm.) is approximately 5,000 ± 10%.

Colors:

D-1009 White – small, standard
D-2522 Pink – small, standard, XL
D-2596 Red – small, standard
D-2861 Ford® Red – standard, XL
D-3564 Orange – small, standard, XL
D-4196 Yellow – XL
D-4744 Yellow – small, standard, XL
D-4811 Heavy Yellow – standard, XL
D-5865 Ford Green – small, standard, XL
D-6031 Light Blue – small, standard
D-6699 Blue – standard, XL
D-8505 Gray – standard
D-9195 Black – standard

Balance Inspection



Sizes:

Small Size= 5-8 mm.
Standard Size= 10-13mm.
Extra Large Size= 18-23mm.

INDUSTRIAL CRAYONS

Ply Markers & Crayons

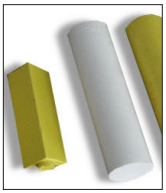
Product Code: C Series
A widely used tool, these products have been incorporated into several stages of the tire making process including marking raw material bales, fabric cord calendaring, tread and sidewall extrusion, inner liner calendaring, tire building, and inspection.

Ply Marker Crayons, or fugitive crayons, are used to mark uncured (internal) rubber surfaces such as calendered material, plies, and bead rings. They can also be used to mark cured (external) rubber surfaces such as defect areas during visual inspection.

Ply Markers and Crayons are available in standard, jumbo, and triangular sizes and can be applied manually or by machine.

Sizes:
Standard, Triangular, Jumbo

Colors:
C-0300 Disappearing
C-0303 Ultraviolet Visible
C-1120 White (standard)
C-2055 Pink (standard)
C-2185 New Red
C-2190 Red (standard)
C-2225 Very Red
C-2328 Brown (standard)
C-3150 Orange (standard)
C-3165 New Orange
C-4320 Yellow (standard)
C-5284 Light Green
C-5520 Green (standard)
C-6155 Light Blue
C-6420 Blue (standard)
C-7491 Lavender (standard)
C-8490 Gray (standard)



FEATURES

Wide Range of Colors Available
Excellent Adhesion
Safe for Internal or External Use
Does Not Cause Delamination
Easy to Use
Contains No VOCs

LUBRICANT COATINGS

Whitslik™

Product Code: Q Series

Lubricants and release agents are used to meet processing, application, and performance requirements in the curing and final finish stages of production. These products primarily function to help reduce scrap.

Inside Tire Lubricant

Q-0960* No mica content, Curable
Q-2000 No mica content
Q-0410 10% mica
Q-8005 10% mica, Gray Tint

Proven & Tested for Slip
Excellent Air Bleed
Extends Bladder Lifecycle
Reduces Uniformity Issues
Does Not Flake After Curing

Bladder Coating

Q-0035

Conditions New Bladders
Refreshes Bladders During Cure
Air Dry
Extends Bladder Lifecycle

Prevents Corrosion
Prevents Rim Slip
Low Odor
Minimizes Uniformity Issues

Mounting Lubricant (Uniformity Inspection)

Q-0133 Silicone-Free
Q-0658 Silicone-Free, Concentrate (*Dilute 4:1 deionized water)*

Long-lasting
Exceptional Anti-stick
Improves Rubber Flow
Keeps Vents Open
Prevents Lights/Non-fills

Mold Release Agent

Q-0020*
Q-0080
Q-0024 Mandrel Release
Q-0043 Mandrel Release

**Cannot ship outside of North America*

CEMENTS

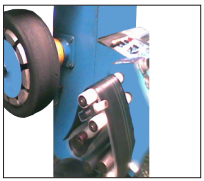
Water-based Undertread, Retread & Splice Cement

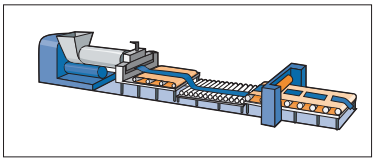
Product Code: N-9935

This product can be utilized on two components of the tire, treads or splices. Manufacturers spray or gravure apply a thin film of the cement to the underside of extruded treads and again on the splice (or skive) areas. An ideal replacement to liberally- applied solvent-based cements, high adhesion performance is achieved with a minimal amount of this product. When coated, the cured tread will show above average adhesion to most compounds, while leaving no air spaces/voids.

Ideal for retread manufacturers, N-9935 has proven long-term success and cost saving advantages when adhering new tread compound to salvaged tire carcasses.

When spray applying this cement, APV recommends a finely atomized air/fluid spray gun for optimum coverage and film thickness.





Tread and Sidewall Extruding

FEATURES

Curable
Will Not Re-Solvate in Cooling Bath
No Health or Environmental Hazards
Cleanup Without Solvents
Will Not Stick to Tread Booking Trays
Not a Fire Hazard
Economical/High Solids
Low Odor
Contains No VOCs

Contains No VOCs
No Health or Environmental Hazards
Not a Fire Hazard
Economical/High Solids
Easy Clean Up

Curable
Easy to apply
Excellent Adhesion
Low Odor

FEATURES

Water-based Bead Dip Cement

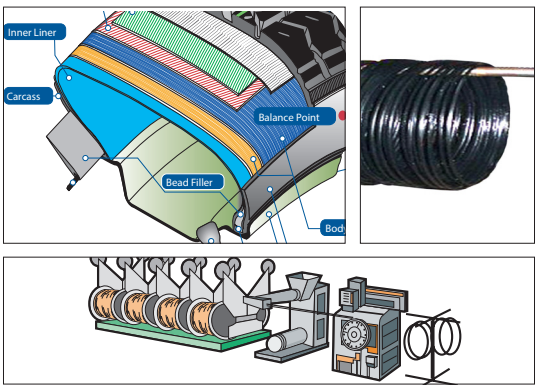
waterbased

Product Code: N-9994

This is a water-based cement applied onto uncured bead rings during the bead assembling process in tire production. Bead Dip Cement provides exceptional adhesion of the ring to the carcass and inner liner after curing.

Conventionally, the rings are dipped into a 'bath' of N-9994 for even coverage. The water-based and zero VOC content minimizes odor and emissions from the tank produced from solvent-based alternatives.

APV recommends a plastic or stainless steel tank (with stainless steel welds), slow agitation, and pH level inspections for optimum application. If necessary, our L-400 solution can be used to maintain proper pH balance.



Bead Assembling

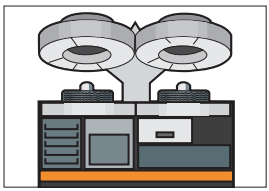
TIRE PAINTS

Water-based, Pre-cure Outside Tire Paint

Product Code: P-9990, P-9992, P-9346, P-9572

This line of Outside Tire Paint, also termed anti-blemish paint, is spray-applied to uncured or green rubber surfaces. In addition to improving aesthetics, Outside Tire Paint provides a clean release from the mold/curing press. These paints are also used to promote rubber flow and air release, which eliminates lights, cracks, non-fills and blisters.

P-9990 Smooth, uniform sidewall finish, ideal for decals
P-9992 Lower solids version of the P-9990
P-9346 Higher adhesion version of P-9990
P-9572 High solids and fast drying


Tire Curing

FEATURES

Curable
Easy to Apply
Fast Drying
Eliminates Lights and Cracks
Eliminates Non-Fills
Improves Rubber Flow
Industry Proven
Creates a Uniform Surface
Reduces Waste/Scrap
Three Solids Levels Available
Contains No VOCs

Reduce Scrap
Economical/Thin Film
Improves Aesthetics

Emulates a Cured Finish
Provides Excellent Hiding
Durable Finish

FEATURES

Water-based, Post-cure Repair Paint

Product Code: P-9562, P-9217, P-9382, P-9383

Repair Paints are used on cured rubber in the final finish and inspection stage in tire and retread production. Repair Paints cosmetically hide imperfections on a tire sidewall or tread surface, eliminating blemishes, scratches, chalk, crayon marks, etc. The product is spray-applied with an atomized spray gun for an even, smooth coverage.

Water-based, Post-cure Sidewall Protective Paints

Product Code: P-6922, P-6004

Protective Paints are used in the final finish stage in production on cured white lettering and white sidewall panels to maintain aesthetics and protect against staining. This product has been proven to minimize staining caused by stacking tires during storage, shipping and handling.

FEATURES

Scuff Resistant
Stain Resistant
Excellent Appearance

Excellent Flexibility- will not flake
Excellent Abrasion Resistance
Water-Removable

GRAPHICS & DECALS

Water-based Stencil Ink

Product Code: T-1019
Stencil Ink is used to enhance race tire sidewalls, hoses, golf grips and other cured rubber product surfaces requiring a logo or brand name. Specifically formulated for cured rubber compounds, Stencil Ink can be easily applied with HVLP or conventional spray equipment.

Decals

Product Code: CUSTOM
These screen-printed decals are widely used in tire production. An alternative to spraying, the product is cast onto Mylar sheets and applied to cured rubber surfaces using a post-cure heat transfer method (time, temperature, and pressure). The result is a high resolution, long-lasting decal.

The Technical Sales Team works with manufacturers on the design, color, and location of the decal, as well as procurement of the application equipment. Originally engineered for race tires, decals can also be applied to lawn and garden equipment tires, ATVs, and golf cart tires.

FEATURES

- Easy to Apply
- Sharp and Crisp Letters/Images
- Abrasion and Scuff Resistant
- Color Retention
- No Bleed-Through
- High Resolution
- High Hiding
- Adheres to Many Substrates

APV ENGINEERED COATINGS

Connect with us:

(800) 772.3452

sales@apvcoatings.com

www.apvcoatings.com

APV ENGINEERED COATINGS . 1390 Firestone Parkway Akron, Ohio 44301 USA