COATING & MARKING PRODUCTS



MANUFACTURING



www.apvcoatings.com | 1.800.772.3452







Any color as long as it's 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 world-wide environmental requirements.

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

Our Engineering Team designs and installs completely customized 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 lnks are applied with a pressurized syringe or capillary tube and packaged in gallon containers or five gallon pails.

Colors:

TR-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 and TR 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, DM, DMH and DL 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-8016 Gray

• • • • • • •			
DH-1611	White	DL-1858	White
DH-2330	New Red	DL-2925	Red
DH-2570	Red	DL-2832	Pink
DH-2944	Pink	DL-2952	Brown
DH-2834	Brown	DL-3948	Orange
DH-3676	Orange	DL-4952	Yellow
DH-4313	New Yellow	DL-5924	Green
DH-4912	Yellow	DL-6009	Blue
DH-5675	Green	DL-7897	Lavender
DH-6677	Blue	DL-8075	Gray
DH-6688	Light Blue		
DH-7678	Lavender		

DM-2640	Pink		DMH-3642	Orange
DM-3641	Orange		DMH-4551	Yellow
DM-4550	Yellow		DMH-5643	Green
DM-5642	Green		DMH-6641	Blue
DM-6639	Blue	Λ		







Pressurized capillary system application for DL and TC inks

MARKING INKS

Water-based Defect Marking Ink water-



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 cocurable 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

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





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 $5,000 \pm 10\%$.

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 Aids with Synchronization **Pocket-Sized** Easy to Use

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 $5.000 \pm 10\%$.

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

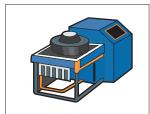
D-6699 Blue - standard, XL D-8505 Gray - standard D-9195 Black - standard



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



Balance Inspection



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

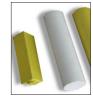
C-5520 Green (standard)

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

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

Mounting Lubricant (Uniformity Inspection)

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

Mold Release Agent

Q-0020*

Q-0080

Q-0024 Mandrel Release

0-0043 Mandrel Release

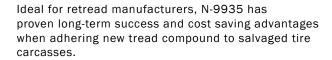
CEMENTS

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.

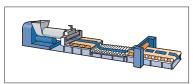


When spray applying this cement, APV recommends a finely atomized air/fluid spray gun for optimum coverage and film thickness.









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

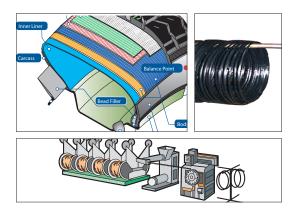


Product Code: N-9994

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 sprayapplied 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.

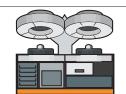
P-9990 Smooth, uniform sidewall finish, ideal for decals

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













(800) 772.3452 sales@apvcoatings.com

www.apvcoatings.com