Banner PRODUCT GUIDE

PVC & CPVC
CEMENTS, PRIMERS, CLEANERS

Made in the USA

LOW VOC

NSF Certified to NSF/ANSI 81-G

QUALITY CONTROL NSF APPROVED 100% GUARANTEED

Plastic Pipe Cements, Primers & Cleaners

LOW VOC

NSF Certified to NSF/ANSI 81-G

Banner BRONZE
Regular Bodied • Clear
For all pressure and non-pressure pipe up to 110 mm (4")

Banner SILVER
Heavy Bodied • Clear
For all pressure and non-pressure pipe up to 160 mm (6")

Banner GOLD
Extra Heavy Bodied
Clear / Grey
For all pressure and non-pressure pipe up to 280 mm (10")

Banner PRIMER
Purple
For all PVC-U, PVC-C
Pipe & Fitting applications

Banner CLEANER
Clear
For all PVC-U, PVC-C
Pipe & Fitting applications

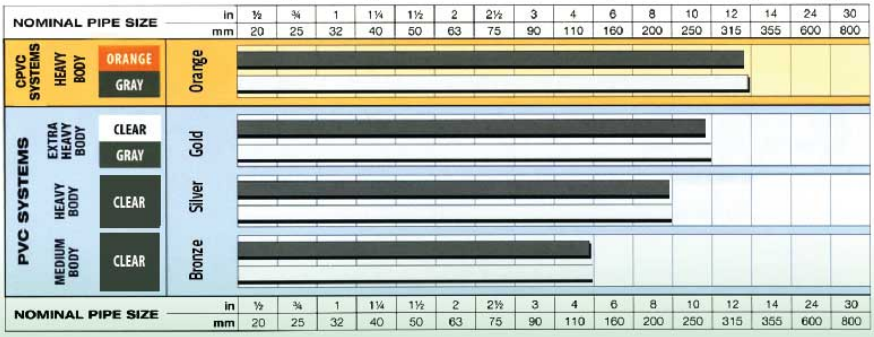
Introduction

Banner is a pioneer in the solvent cement industry and has specialized in manufacturing solvent cements, primers and cleaners for joining PVC, CPVC and ABS plastic pipe. We have a long tradition of engineering excellence and innovation that we are proud to provide to you through our complete line of Banner products.

Banner cements is developed for a specific purpose by skilled technicians in our well-equipped laboratory. Every production batch of Banner cement is checked to assure that consistent quality is maintained. All retained batch samples are kept for a period of at least one year. A batch identification code is stamped on each can which gives the date of manufacture.

BANNER CEMENT SELECTION GUIDE

For assistance in selecting the right Banner Industrial products for your application.



PIPE FORMAT

- ☐ Schedule 40, PN3.2, PN4, PN6
- ■ Schedule 80, PN10, PN16

LOW VOC

* For CPVC and PVC Chemical Piping Systems

Banner Bronze
PVC Pipe Cement Clear

Professional grade, high strength PVC cement specially formulated to join pipe and fitting surfaces and create a strong quick bond

- Smaller body formulation delivers good gap filling capacity between pipe & fittings.
- Clear formulation for clean joints in exposed installations.
- For all classes and schedules of PVC pipe thru 4".
- For PVC pipe and fitting applications; potable water, pressure, non-pressure, conduit, drain, duct, DWV and sewer.

Product Summary

Part Number	Can Size	Description
Banner BRONZE	118 ml	Clear Regular Bodied PVC Cement, 4 oz
Banner BRONZE	236 ml	Clear Regular Bodied PVC Cement, 8 oz
Banner BRONZE	473 ml	Clear Regular Bodied PVC Cement, 16 oz
Banner BRONZE	946 ml	Clear Regular Bodied PVC Cement, 32 oz

Color:	Clear
Odor:	Ketone
Specific Gravity:	0.886 @23C (73° F)
Body:	Regular Bodied
Maximum Pipe Diameter:	For pipe sizes with interference fit thru 04" all classes and schedules.
Relative Set Time:	Lower Set Time.
Industry Performance Specification:	ASTM D-2564
Chemical Composition:	Ethyl Acetate, Methyl Ketone(MEK), Acetone, Cyclohexanone
VOC Content:	When applied as direct, per SCAQMD Rule 1168, Test Method 316A, VOC content is ≤ 510 g/l.
Melting/ Freezing Point:	-16.3°C (-2.66°F) Based on first melting Cyclehexanone

Banner Silver
PVC Pipe Cement Clear

- Industrial grade, high strength PVC cement for large diameter applications or where more working time is required. Also recommended for hot weather applications.
- Heavy body formulation delivers superior gap filling capacity between pipe & fittings
- Clear formulation for clean joints in exposed installations.
- For pipe sizes with interference fit thru 6" all classes and schedules.
- For PVC pipe and fitting applications; potable water, pressure, non-pressure, conduit, drain, duct, DWV and sewer.

Product Summary

Part Number	Can Size	Description
Banner SILVER	118 ml	Clear Heavy Bodied PVC Cement, 4 oz
Banner SILVER	236 ml	Clear Heavy Bodied PVC Cement, 8 oz
Banner SILVER	473 ml	Clear Heavy BodiedPVC Cement, 16 oz
Banner SILVER	946 ml	Clear Heavy Bodied PVC Cement, 32 oz

Color:	Clear
Odor:	Ketone
Specific Gravity:	0.886 @23C (73° F)
Body:	Heavy Bodied
Maximum Pipe Diameter:	For pipe sizes with interference fit thru 06" all classes and schedules.
Relative Set Time:	Medium Set Time
Industry Performance Specification:	ASTM D-2564
Chemical Composition:	Ethyl Acetate, Methyl Ketone(MEK), Acetone, Cyclohexanone
VOC Content:	When applied as direct, per SCAQMD Rule 1168, Test Method 316A, VOC content is ≤ 510 g/l.
Melting/ Freezing Point:	-16.3°C (-2.66°F) Based on first melting Cyclehexanone

Banner Gold

PVC Pipe Cement Clear / Gray

- Industrial grade, high strength PVC cement for large diameter applications or where more working time is required. Also recommended for hot weather applications.
- Heavy body formulation delivers superior gap filling capacity between pipe & fittings.
- Clear formulation for clean joints in exposed installations.
- Gray color enables visual confirmation that cement has been applied.
- For pipe sizes with interference fit thru 10" all classes and schedules.
- For PVC pipe and fitting applications; potable water, pressure, non-pressure, conduit, drain, duct, DWV and sewer.

Product Summary

Part Number	Can Size	Description
Banner GOLD	118 ml	Clear / Gray Heavy Bodied PVC Cement, 4 oz
Banner GOLD	236 ml	Clear / Gray Heavy Bodied PVC Cement, 8 oz
Banner GOLD	473 ml	Clear / Gray Heavy Bodied PVC Cement, 16 oz
Banner GOLD	946 ml	Clear / Gray Heavy Bodied PVC Cement, 32 oz

Color:	Gray / Clear
Odor:	Ketone
Specific Gravity	0.915 @23°C(73°F)
Body:	Extra Heavy Bodied
Maximum Pipe Diameter:	For pipe sizes with interference fit thru 10" all classes and schedules.
Relative Set Time:	Higher Set Time
Chemical Composition:	Ethyl Acetate, Methyl Ketone(MEK), Acetone, Cyclohexanone
Industry Performance Specifications:	NSF/ANSI 14, NSF/ANSI 61, CSA B137.3, CSA B181.2
VOC Content:	When applied as direct, per SCAQMD Rule 1168, Test Method 316A, VOC content is ≤ 510 g/l.
Melting/ Freezing Point:	-108°C (-162°F) Based on first melting component: THF

Banner Primer
Purple

- Professional grade, industrial strength purple primer esential for proper softening and preparation of PVC and CPVC pipe and fitting surface.
- Specially recommended for use on Schedule 80 (PN 10 and higher) and large size pipe.
- Excellent, even in cold weather applications.

Product Summary

Part Number	Can Size	Description
Banner PURPLE PRIMER	473 ml	Purple Primer, 16 oz
Banner PURPLE PRIMER	946 ml	Purple Primer, 32 oz

Banner Cleaner
Clear

- For removal of oil and grease from the surface of PVC, CPVC, ABS and STYRENE pipe and fittings for bonding.
- Recommended for use before priming of pipe and fittings.

Product Summary

Part Number	Can Size	Description
Banner CLEANER CLEAR	473 ml	Cleaner Clear, 16 oz
Banner CLEANER CLEAR	946 ml	Cleaner Clear, 32 oz

Banner's All Low VOC product's benifits:

High Quality Performance. With excelent installation properties.

User Friendly. Reduced fumes and odor for the fomfort and well-being of pipe installers.

NSF Listed. Products are qualified for use in applications such as potable water, turf, irrigation, pool, industirla, conduit, DWV and/or sewer.

Meet ASTM Standards. For solvent cements and primers used for plastic pipe installation.

Banner Products	Primers/Cleaners	PVC Solvent Cement
Maximum VOC Emmission (Gram/Liter)	550	510

AVERAGE INITIAL SET SCHEDULE FOR BANNER PVC/CPVC SOLVENT CEMENTS**

Temperature Range	Pipe Sizes 1/2" to 1 1/4" 20mm to 40mm	Pipe Sizes 1 1/2" to 2" 50mm to 63mm	Pipe Sizes 2 1/2" to 8" 75mm to 200mm	Pipe Sizes 10" to 15" 250mm to 380mm
60°-100°F/16°-38°C	2 minutes	5 minutes	30 minutes	2 hours
40°-60°F/5°-16°C	5 minutes	10 minutes	2 hours	8 hours
0°-40°F/-18°-5°C	10 minutes	15 minutes	12 hours	24 hours

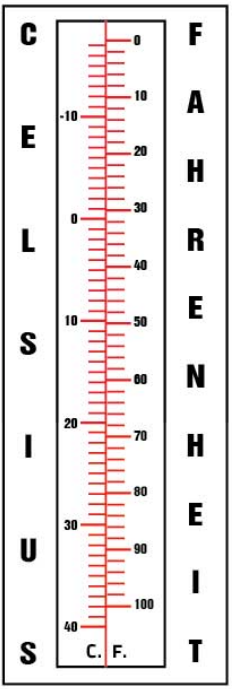
Note - Initial set schedule is the necessary time to allow before the joint can be carefully handled. In demp or humid weather allow 50% more set time.

AVERAGE JOINT CURE SCHEDULE FOR BANNER PVC/CPVC SOLVENT CEMENTS**

Relative Humidity 60% or Less	Pipe Sizes 1/2" to 1 1/4" 20mm to 40mm		Pipe Sizes 1 1/2" to 2" 50mm to 63mm		Pipe Sizes 2 1/2" to 8" 75mm to 200mm		Pipe Sizes 10" to 15" 250mm to 380mm
Temeprature range during assembly and cure periods	up to 160 psi/ 11 Bar	160 to 370 psi/ 11 to 26 Bar	up to 160 psi/ 11 Bar	160 to 315 psi/ 11 to 22 Bar	up to 160 psi/ 11 Bar	160 to 370 psi/ 11 to 26 Bar	up to 100 psi / 7 Bar
60°-100°F/16°-38°C	15 min	6 hrs	30 min	12 hrs	1 1/2 hrs	12 hrs	48 hrs
40°-60°F/5°-16°C	20 min	12 hrs	45 min	24 hrs	4 hrs	24 hrs	96 hrs
0°-40°F/-18°-5°C	30 min	48 hrs	1 hour	96 hrs	72 hrs	96 hrs	8 days

Note - Joint cure schedule is the necessary time to allow before pressurizing system. In damp or humid weather allow 50% more cure time.

**These figures are estimates based on testing done under laboratory conditions. Field working conditions can vary significantly. This chart should be used as a general reference only.



AVERAGE NUMBER OF JOINT/QUART (1Kg) OF BANNER CEMENT

Pipe Diameters	1/2" 20mm	3/4" 25mm	1" 32mm	1 1/2" 50mm	2" 63mm	3" 90mm	4" 110mm	6" 160mm	8" 200mm	10" 250mm	12" 315mm	15" 380mm
Number of Joints	300	200	125	90	60	40	30	10	5	2.5	1.5	3/4

Note - For Primer: Double the number of joints shown for cement.

*These figures are estimates based on our laborator tests. Due to the many variables in the field, these figures should be used as a general guide only.

NOTE: 1 JOINT = 1 SOCKET

PIPE SIZE EQUIVALENT CHART - INCHES/MILLIMETERS

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"	12"	14"	18"	24"	30"
20mm	25mm	32mm	40mm	50mm	63mm	75mm	90mm	110mm	160mm	200mm	250mm	315mm	355mm	450mm	600mm	800mm

PRODUCT SHELF LIFE

Banner Products	Shelf-life
Primers / Cleaners	3 years
PVC Solvent Cement	3 years

Banner PVC & CPVC CEMENTS, PRIMERS, CLEANERS Made in the USA

GHS SAFETY DATA SHEET

Banner Silver Clear Low VOC Cement for PVC Plastic Pipe

Date Revised: **MAY 2014**
Supersedes:

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Banner Silver Clear Low VOC Cement for PVC Plastic Pipe**
PRODUCT USE: Low VOC Solvent Cement for PVC Plastic Pipe
SUPPLIER:
MANUFACTURER:

BANNER PRODUCTS USA
2106, EASTLAKE STREET
MN55407-ST. PAUL, U.S.A
info@bannerproductsusa.com
www.bannerproductsusa.com

EMERGENCY: Transportation: CHEMTEL Tel. 800.255-3924, 813-248-0585 (International) **Medical:** Tel. 800.451.8346, 760.602.8703 3E Company (International)

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health		Environmental		Physical	
Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid	Category 2
Skin Irritation:	Category 3	Chronic Toxicity:	None Known		
Skin Sensitization:	NO				
Eye:	Category 2B				

GHS LABEL:  OR  **Signal Word DANGER**

WHMIS CLASSIFICATION: CLASS B, DIVISION 2

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
H319: Causes serious eye irritation	P261: Avoid breathing dust/fume/gas/mist/vapors/spray
H335: May cause respiratory irritation	P280: Wear protective gloves/protective clothing/eye protection/face protection
H336: May cause drowsiness or dizziness	P337+P313: Get medical advice/attention
EUH019: May form explosive peroxides	P403+P233: Store in a well ventilated place. Keep container tightly closed
EUH066: Repeated exposure may cause skin dryness or cracking	P501: Dispose of contents/container in accordance with local regulation

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH Pre-registration Number	CONCENTRATION % by Weight
Ethyl Acetate	141-78-6	205-500-4	Under development	2 - 8
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	25 - 50
Acetone	67-64-1	200-662-2	05-2116297713-35-0000	20 - 40
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	0 - 10

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.
* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).
# indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

SECTION 4 - FIRST AID MEASURES

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.
Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.
Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.
Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.
Unsuitable Extinguishing Media: Water spray or stream.
Exposure Hazards: Inhalation and dermal contact
Combustion Products: Oxides of carbon, hydrogen chloride and smoke
Protection for Firefighters: Self-contained breathing apparatus or full-face positive pressure airline masks.

	HMIS	NFPA	
Health	2	2	0-Minimal
Flammability	3	3	1-Slight
Reactivity	0	0	2-Moderate
PPE	B		3-Serious
			4-Severe

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep away from heat, sparks and open flame.
Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.
Prevent contact with skin or eyes (see section 8).
Environmental Precautions: Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.
Methods for Cleaning up: Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.
Materials not to be used for clean up: Aluminum or plastic containers

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid breathing of vapor, avoid contact with eyes, skin and clothing.
Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.
Do not eat, drink or smoke while handling.
Storage: Store in ventilated room or shade below 44°C (110°F) and away from direct sunlight.
Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.
Follow all precautionary information on container label, product bulletins and solvent cementing literature.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL:
Ethyl Acetate	400 ppm	100 ppm	200 ppm	
Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	
Acetone	500 ppm	750 ppm	1000 ppm	
Cyclohexanone	20 ppm	50 ppm	50 ppm	

Engineering Controls: Use local exhaust as needed.
Monitoring: Maintain breathing zone airborne concentrations below exposure limits.
Personal Protective Equipment (PPE):
Eye Protection: Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.
Skin Protection: Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.
Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.
Respiratory Protection: Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above. With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

NSF APPROVED

Banner PVC & CPVC CEMENTS, PRIMERS, CLEANERS Made in the USA

GHS SAFETY DATA SHEET

Banner Gold Clear Low VOC Cement for PVC Plastic Pipe

Date Revised: **MAY 2014**

Supersedes:

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Banner Gold Clear Low VOC Cement for PVC Plastic Pipe**

PRODUCT USE: Low VOC Solvent Cement for PVC Plastic Pipe

DISTRIBUTOR:

MANUFACTURER:

BANNER PRODUCTS USA
2106, EASTLAKE STREET
MN55407-ST. PAUL, U.S.A
info@bannerproductsusa.com
www.bannerproductsusa.com

EMERGENCY: Transportation: CHEMTEL Tel. 800.255-3924, 813-248-0585 (International) **Medical:** Tel. 800.451.8346, 760.602.8703 3E Company (International)

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health		Environmental		Physical	
Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid	Category 2
Skin Irritation:	Category 3	Chronic Toxicity:	None Known		
Skin Sensitization:	NO				
Eye:	Category 2B				

GHS LABEL:   OR  

Signal Word: **Danger**

WHMIS CLASSIFICATION: CLASS B, DIVISION 2

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
H319: Causes serious eye irritation	P261: Avoid breathing dust/fume/gas/mist/vapors/spray
H335: May cause respiratory irritation	P280: Wear protective gloves/protective clothing/eye protection/face protection
H336: May cause drowsiness or dizziness	P337+P313: Get medical advice/attention
EUH019: May form explosive peroxides	P403+P233: Store in a well ventilated place. Keep container tightly closed
	P501: Dispose of contents/container in accordance with local regulation

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH Pre-registration Number	CONCENTRATION % by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	05-2116297729-22-0000	5 - 55
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	10 - 40
Acetone	67-64-1	200-662-2	05-2116297713-35-0000	5 - 25
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	10 - 35

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.
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# indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

SECTION 4 - FIRST AID MEASURES

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.

Unsuitable Extinguishing Media: Water spray or stream.

Exposure Hazards: Inhalation and dermal contact

Combustion Products: Oxides of carbon, hydrogen chloride and smoke

	HMIS	NFPA	0-Minimal
Health	2	2	1-Slight
Flammability	3	3	2-Moderate
Reactivity	0	0	3-Serious
PPE	B		4-Severe

Protection for Firefighters: Self-contained breathing apparatus or full-face positive pressure airline masks.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep away from heat, sparks and open flame.
Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.
Prevent contact with skin or eyes (see section 8).

Environmental Precautions: Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.

Methods for Cleaning up: Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.

Materials not to be used for clean up: Aluminum or plastic containers

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid breathing of vapor, avoid contact with eyes, skin and clothing.
Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.
Do not eat, drink or smoke while handling.

Storage: Store in ventilated room or shade below 44°C (110°F) and away from direct sunlight.
Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.
Follow all precautionary information on container label, product bulletins and solvent cementing literature.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL:
Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	
Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	
Cyclohexanone	20 ppm	50 ppm	50 ppm	
Acetone	500 ppm	750 ppm	1000 ppm	

Engineering Controls: Use local exhaust as needed.

Monitoring: Maintain breathing zone airborne concentrations below exposure limits.

Personal Protective Equipment (PPE):

Eye Protection: Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.

Skin Protection: Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.
Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.

Respiratory Protection: Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above. With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

NSF APPROVED

GHS SAFETY DATA SHEET

Date Revised: **MAY 2014**
Supersedes:

Banner Gold Gray Low VOC Cement for PVC Plastic Pipe

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Banner Gold Gray Low VOC Cement for PVC Plastic Pipe**

PRODUCT USE: Low VOC Solvent Cement for PVC Plastic Pipe

DISTRIBUTOR:

MANUFACTURER:
BANNER PRODUCTS USA
2106, EASTLAKE STREET
MN55407-ST. PAUL, U.S.A
info@bannerproductsusa.com
www.bannerproductsusa.com

EMERGENCY: Transportation: CHEMTEL Tel. 800.255-3924, 813-248-0585 (International)

Medical: Tel. 800.451.8346, 760.602.8703 3E Company (International)

SECTION 2 - HAZARDS IDENTIFICATION

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Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid	Category 2
Skin Irritation:	Category 3	Chronic Toxicity:	None Known		
Skin Sensitization:	NO				
Eye:	Category 2B				

GHS LABEL:  OR 

Signal Word: **Danger**

WHMIS CLASSIFICATION: CLASS B, DIVISION 2

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
H319: Causes serious eye irritation	P261: Avoid breathing dust/fume/gas/mist/vapors/spray
H335: May cause respiratory irritation	P280: Wear protective gloves/protective clothing/eye protection/face protection
H336: May cause drowsiness or dizziness	P337+P313: Get medical advice/attention
EUH019: May form explosive peroxides	P403+P233: Store in a well ventilated place. Keep container tightly closed
	P501: Dispose of contents/container in accordance with local regulation

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH Pre-registration Number	CONCENTRATION % by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	05-2116297729-22-0000	5 - 55
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	10 - 40
Acetone	67-64-1	200-662-2	05-2116297713-35-0000	5 - 25
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	10 - 35

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# indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

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Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.

Unsuitable Extinguishing Media: Water spray or stream.

Exposure Hazards: Inhalation and dermal contact

Combustion Products: Oxides of carbon, hydrogen chloride and smoke

Protection for Firefighters: Self-contained breathing apparatus or full-face positive pressure airline masks.

	HMIS	NFPA
Health	2	2
Flammability	3	3
Reactivity	0	0
PPE	B	

0-Minimal
1-Slight
2-Moderate
3-Serious
4-Severe

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep away from heat, sparks and open flame.
Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.
Prevent contact with skin or eyes (see section 8).

Environmental Precautions: Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.

Methods for Cleaning up: Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.

Materials not to be used for clean up: Aluminum or plastic containers

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid breathing of vapor, avoid contact with eyes, skin and clothing.
Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.
Do not eat, drink or smoke while handling.

Storage: Store in ventilated room or shade below 44°C (110°F) and away from direct sunlight.
Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.
Follow all precautionary information on container label, product bulletins and solvent cementing literature.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL:
Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	
Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	
Cyclohexanone	20 ppm	50 ppm	50 ppm	
Acetone	500 ppm	750 ppm	1000 ppm	

Engineering Controls: Use local exhaust as needed.

Monitoring: Maintain breathing zone airborne concentrations below exposure limits.

Personal Protective Equipment (PPE):

Eye Protection: Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.

Skin Protection: Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.
Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.

Respiratory Protection: Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above. With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

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GHS SAFETY DATA SHEET

Banner Bronze Clear Low VOC Cement for PVC Plastic Pipe

Date Revised: **MAY 2014**
Supersedes:

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Banner Bronze Clear Low VOC Cement for PVC Plastic Pipe**

PRODUCT USE: Low VOC Solvent Cement for PVC Plastic Pipe

SUPPLIER:

MANUFACTURER:
BANNER PRODUCTS USA
2106, EASTLAKE STREET
MN55407-ST. PAUL, U.S.A
info@bannerproductsusa.com
www.bannerproductsusa.com

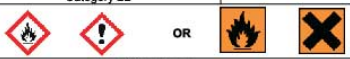
EMERGENCY: Transportation: CHEMTEL Tel. 800.255-3924, 813-248-0585 (International)

Medical: Tel. 800.451.8346, 760.602.8703 3E Company (International)

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health		Environmental		Physical	
Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid	Category 2
Skin Irritation:	Category 3	Chronic Toxicity:	None Known		
Skin Sensitization:	NO				
Eye:	Category 2B				

GHS LABEL:  OR

Signal Word
DANGER

WHMIS CLASSIFICATION: CLASS B, DIVISION 2

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
H319: Causes serious eye irritation	P261: Avoid breathing dust/fume/gas/mist/vapors/spray
H335: May cause respiratory irritation	P280: Wear protective gloves/protective clothing/eye protection/face protection
H336: May cause drowsiness or dizziness	P337+P313: Get medical advice/attention
EUH019: May form explosive peroxides	P403+P233: Store in a well ventilated place. Keep container tightly closed
EUH066: Repeated exposure may cause skin dryness or cracking	P501: Dispose of contents/container in accordance with local regulation

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH Pre-registration Number	CONCENTRATION % by Weight
Ethyl Acetate	141-78-6	205-500-4	Under development	2 - 8
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	25 - 50
Acetone	67-64-1	200-662-2	05-2116297713-35-0000	20 - 40
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	0 - 10

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.
* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).
# indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

SECTION 4 - FIRST AID MEASURES

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.
Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.
Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.
Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.
Unsuitable Extinguishing Media: Water spray or stream.
Exposure Hazards: Inhalation and dermal contact
Combustion Products: Oxides of carbon, hydrogen chloride and smoke
Protection for Firefighters: Self-contained breathing apparatus or full-face positive pressure airline masks.

	HMIS	NFPA	0-Minimal
Health	2	2	1-Slight
Flammability	3	3	2-Moderate
Reactivity	0	0	3-Serious
PPE	B		4-Severe

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep away from heat, sparks and open flame.
Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.
Prevent contact with skin or eyes (see section 8).
Environmental Precautions: Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.
Methods for Cleaning up: Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.
Materials not to be used for clean up: Aluminum or plastic containers

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid breathing of vapor, avoid contact with eyes, skin and clothing.
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Follow all precautionary information on container label, product bulletins and solvent cementing literature.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL:
Ethyl Acetate	400 ppm	100 ppm	200 ppm	
Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	
Acetone	500 ppm	750 ppm	1000 ppm	
Cyclohexanone	20 ppm	50 ppm	50 ppm	

Engineering Controls: Use local exhaust as needed.
Monitoring: Maintain breathing zone airborne concentrations below exposure limits.
Personal Protective Equipment (PPE):
Eye Protection: Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.
Skin Protection: Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.
Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.
Respiratory Protection: Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above. With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

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