

BAF Industries

Car Wash Products

Competitive Product Performance Analysis: Hydrominder™ 511

Date: _____
 Prospect Name: _____
 Address: _____
 City: _____ State: _____
 Analysis Completed By: _____
 Competitive Product Manufacturer: _____

Competitive Product Name: _____

Container: Size _____ Current Tip Being Used: _____ =Dilution Rate: _____

\$ _____ / _____ = \$ _____
 (cost per container) (mls per container) (cost per ml)

_____ / _____ = _____
 (mls of stock solution used (dilution rate) (mls of concentrate per cycle minute)
 per cycle minute)

_____ x \$ _____ = \$ _____
 (mls of concentrate used (cost per ml) (cost per cycle minute)

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 Car Wash Products

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_____ / _____ = _____
 (mls of stock solution used (dilution rate) (mls of concentrate per cycle minute)
 per cycle minute)

_____ x \$ _____ = \$ _____
 (mls of concentrate used (cost per ml) (cost per cycle minute)
 per cycle minute)

Milliliters in Containers:

55 gal's	= 207,680 mls
30 gal's	= 113,280 mls
15 gal's	= 56,640 mls
7 gal's	= 26,732 mls
5 gal's	= 18,880 mls
1 gal's	= 3,776 mls
1 ounce	= 29.5 mls

Ounces to Milliliters:

1 ounce = 1.0	= 29.50 mls
3/4 ounce = .75	= 22.13 mls
1/2 ounce = .50	= 14.74 mls
1/4 ounce = .25	= 7.38 mls
1/6 ounce = .166	= 4.92 mls
1/8 ounce = .125	= 3.69 mls
1/16 ounce = .0625	= 1.84 mls
1/32 ounce = .03125	= .92 mls

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Car Wash Products

Competitive Product Performance Analysis: Hydrominder™ 511

Date: 4/24/01
 Prospect Name: Bubbles Car Wash
 Address: 1315 E. Tropicana
 City: Las Vegas State: NV
 Analysis Completed By: B. Myers
 Competitive Manufacturer: Blue Coral

Competitive Product Name: Blue Coral Foaming Brush
 Container: Size 30-gallon Current Tip Being Used: Purple =Dilution Rate: 120:1

\$ 250.00 / (cost per container) 113,280 (mls per container) = \$.0022 (cost per ml)

1.888 / (mls of stock solution used per cycle minute) 120 (dilution rate) = 15.73 (mls of concentrate per cycle minute)

15.73 (mls of concentrate used per cycle minute) x \$.0022 (cost per ml) = \$.034 (cost per cycle minute)

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Car Wash Products

Product Name: **Foaming Auto Shampoo CW-2021-5**

Container: Size 5-gallon Tip Used: Purple =Dilution Rate: pre-dilute@4:1 then 120:1=600:1

\$ 84.44 / (cost per container) 18,880 (mls per container) = \$.0044 (cost per ml)

1.888 / (mls of stock solution per cycle minute) 600 (dilution rate) = 3.14 (mls of concentrate per cycle minute)

3.14 (mls of concentrate used per cycle minute) x \$.0044 (cost per ml) = \$.013 (cost per cycle minute)

Milliliters in Containers

55 gal's = 207,680 mls
 30 gal's = 113,280 mls
 15 gal's = 56,640 mls
 7 gal's = 26,732 mls
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Car Wash Products

Formulas For Product Usage and Cost

Measurement Conversions:

1 oz	=	29.5ml
1gal	=	128oz (3776ml)
5gal	=	640oz (18880ml)
30gal	=	3840oz (113280ml)
55gal	=	7040oz (207680ml)

Standard Hydro Formula:

$$\frac{\text{Stock solution used per cycle}}{\text{Product used per cycle}} = \text{dilution}$$

Bladder Tank Usage Formula:

$$\frac{\text{Amount of stock solution used} \times 60 \text{ seconds}}{\text{Time between cycles}} = \text{amount of cycle per minute}$$

Standard Cost Formula:

$$\frac{\text{Price per container}}{\text{ml per container}} = \text{cost per ml}$$

Cost Per Car/Cycle Formula:

$$\text{Cost per ml} \times \text{ml per cycle} = \text{cost per car}$$

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TRI-FOAMS

Blue/Gold/Red

Tri-Foams are super concentrated, liquid polish foam/conditioner is the latest products formulated for the convey, rollover and bay system car washes. The Tri-Foams gently cover vehicles providing great cleaning and conditioning of the vehicles finish. Resulting in a clean, polish and conditioned finish.

We have tested all three foams at a local bay car wash with great results. Blue Coral products were being used before and were unsure how our products would match up to the competitions. We first had to take a look at each product and equipment being used. This was an average car wash using Hydrominder™'s to dilute the concentrated products and ARO pumps to deliver the products to the Foaming arches.

There are several notes that should be made during a product analysis test.

1. Identifying each product and its purpose?

- a. Wheel cleaner.
- b. First foaming soap cleaner.
- c. Tri-Foam polish/conditioner (blue, gold, red).
- d. Final rinse aid or drying aid.

2. What is the dilution of each product?

- a. Testing with measuring beakers.
- b. Determining Cycle times.
- c. What are the sizes of the measuring Tips?

3. The equipment being used?

- a. There are several different combinations out there.
- b. Get technical information on each direct feed and dilution pump systems.
- c. Purchase diluting/measuring tips so you can tailor our product to what the customer wants or needs.

4. How to determine *Cost Per Car*?

5. How often do they order product?

6. What is the current cost of the competitive products?

7. Is the current set up running at peak performance?

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Car Wash Products

Hydrominder™ Proportioner & Dilution Table

Tip color	Drill Size	506/511	515	525/530	546/551	560/561
No Tip	N.A.	4:1	1:1	4:1	6:1	10:1
Gray	30	5:1	1.2:1	6:1	10:1	20:1
Black	40	6:1	2:1	10:1	20:1	30:1
Beige	50	8:1	4:1	20:1	32:1	64:1
Red	55	17:1	6:1	35:1	48:1	128:1
White	57	23:1	9:1	52:1	67:1	144:1
Blue	60	25:1	10:1	55:1	96:1	173:1
Tan	65	36:1	13:1	70:1	144:1	218:1
Green	70	48:1	21:1	100:1	176:1	306:1
Orange	72	64:1	26:1	140:1	234:1	424:1
Brown	74	75:1	30:1	160:1	291:1	768:1
Yellow	76	90:1	38:1	190:1	416:1	896:1
Purple	80	120:1	50:1	250:1	596:1	930:1
Pink	87	240:1	100:1	530:1	1024:1	1024:1

Note: Values are Approximate and based upon 40 PSI Water-thin viscosity

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Car Wash Products

Self Service Applications

How to determine dilution rate using *Hydrominder™* 511

To determine the dilution rate required, it is necessary to first determine how much stock solution is used, by product, during a 60 second cycle period.

1. Removed the float container and chain from the stock solution tank and secure it so that the Hydro-Minder will not replace the solution in the tank until required.
2. With a marking device, mark the fluid in the stock solution tank.
3. In the bay, select the product being tested on the selector dial and run the system for 60 seconds.
4. Once the system has ran for 60 seconds, return to the equipment room to measure how much product was drawn from the stock solution tank.
5. Using a gallon container and meter beaker, replace the solution used out of the stock solution tank with plain water. Once the tank has been refilled to the original fluid level line, calculate how many ounces of water were used to refill the tank.
6. Determine how many ounces or milliliters of PRO® Car Wash product is recommended based on label directions.
7. Once both factors, ounces of stock solution and recommended milliliters of PRO® Car Wash products per 60-second cycle are known, then a simple calculation of both can be performed to determine dilution rate necessary.

Example:

CW-2032-5 TRI-FOAM (Gold)

60 Second cycle

256 ounces of stock solution used during cycle period

¼ ounce or .250 of Tri-Foam Gold is recommended

Calculation:

256 ounces ÷ .250 = 1024:1

1024:1 is the final dilution needed to insure that ¼ ounce of concentrated product used during a 60 second cycle period.

BAF Industries

Car Wash Products

PRO®, the leader in reconditioning products are happy to introduce another arsenal in the market place. These products are super concentrated and economical to use for the carwash dealers and retailers. *PRO®* will continue to research and develop innovative, high quality solutions that are safe to use and competitive in the market place. Seven products have made it through our field-testing and are ready for use.

- **GET-EM CLEAN WHITEWALL & TIRE CONCENTRATE (CW-2011-5, 55)**

This 10:1, concentrated tire & whitewall cleaner is formulated for use in automatic car wash, high pressure and foaming chemical tire applicators (CTA). Its powerful, non-caustic formula removes oil, dirt, brake dust and road grime in seconds. This biodegradable cleaner leaves whitewalls & tires sparkling clean and showroom new. Will not discolor or deteriorate rubber.

Available in cubes and drums

- **FOAMING AUTO SHAMPOO WASH CONCENTRATE (CW-2021-5)**

This highly concentrated, cherry scented for user recognition, liquid detergent is formulated for use in all types of friction automatic car wash equipment. Covers the vehicle with a rich, lubricating foam that washes away dirt and road grime, while maintaining lubricity on soft cloth mitts and brushes to avoid scratching. Designed for all foaming equipment.

Available in cubes only

- **TRI-FOAM POLISH / CONDITIONER CONCENTRATE (CW-2031-5, CW-2032-5, CW-2033-5)**

These highly concentrated, liquid polish foam/conditioner's come in three customer-recognized colors *Blue*, *Gold* and *Red*. Formulated for use in automatic car wash foam generating equipment. Covers vehicle in thick, rich foam that washes away dirt and road grime, while conditioning the finish for wax or sealant treatments. Tri-Foam's are pH balance formula is synergistic with other tunnel products. Contains a highly active detergent that performs excellent in friction systems.

Available in cubes only

- **DRYING AID / RINSE AID (CW-2081-5)**

Formulated for the use in automatic car washes before drying stage. Reacts with rinse water to bead, separate and sheet off vehicle for faster drying with less labor towel off time. Helps reduce water spotting while enhancing shine and gloss. Highly concentrated for economy. Designed to work in all types of friction operations; tunnel, bay automatics, rollovers and self-serve pressure applications. Use in high or low-pressure rinse applications.

Available in cubes only

- **SEALER WAX (CW-2082-5)**

Formulated for the use in automatic car washes. Helps minimize the effects of the sun. Provides long-lasting wash-resistant protection against the elements. Helps reduce water spotting while enhancing shine and gloss. Highly concentrated for economy. Designed to work in all types of friction operations; tunnel, bay automatics, rollovers and self-serve pressure applications. Use in high or low-pressure sealant applications.

Available in cubes only

BAF Industries

Car Wash Products

FACT SHEET

Name: CW-2011-5 GET-EM CLEAN WHITEWALL&TIRE CONCENTRATE

Description: A concentrated foaming whitewall tire cleaner is formulated for use in automatic car wash, high pressure and foaming chemical tire applicators (CTA's). Formulated with a high alkaline builder combined with surfactant foamers.

Benefits: 10 to 1 concentrate for economy. Cleans thoroughly to prepare tire for dressing application. Biodegradable, Non-caustic formula will not discolor or deteriorate rubber.

Packaging: 5-gallon cube, 55-gallon drum

Dilution:

Stock Solution: Dilute 5-gallons of CW-2011-5 GET-EM CLEAN with 50-gallons of water. Apply 4 ounces per tire through CTA. GET-EM CLEAN may also be used as a conventional whitewall cleaner by hand at 10:1 with water.

Note: (Will vary depending distance from CTA to Brush equipment)

Specifications:

Appearance:	Clear thin amber liquid
Fragrance:	none
Ph:	13.48-13.88
Density:	9.26-9.46 lbs/gal
Emulsifier:	Nonionic/Anionic
DOT Labeling:	Corrosive Liquid (PG II)

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Car Wash Products

FACT SHEET

Name: CW-2021-5 FOAMING AUTO SHAMPOO

Description: Use as an initial vehicle shampoo in all types of tunnel and in-bay automatics, rollovers and self serve brush applications. Contains two high foaming detergents for quick penetration of greasy road film. Cherry fragrance for product identity.

Benefits: A thick rich lather helps lift the soil so that it is easily removed in the tunnel. Concentrated for yields between 1,500 and 2,500 cars per 5-gallon cube. Formulated with lubricity agents to avoid scratching. Rinses easily to a sparkling shine.

Packaging: 5-gallon cube

Dilution:

Stock Solution: Pre-Dilute CW-2021-5 FOAMING AUTO SHAMPOO approx. 4:1 ratio. Using Hydro-Minder 511 purple tip (120:1).

Final Dilution: 600:1 (Will vary depending on car wash equipment)

Specifications:

Appearance:	Clear thin amber liquid
Fragrance:	Cherry
Ph:	9.79-9.99
Density:	8.48-8.68 lbs/gal
Emulsifier:	Nonionic/Anionic
DOT Labeling:	Cleaning Liquid

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Car Wash Products

FACT SHEET

Name: CW-2031-5 TRI-FOAM **BLUE** POLISH FOAM/CONDITIONER
CONCENTRATE

Description: This highly concentrated; liquid polish foam/conditioner is formulated for use in automatic car wash foam generating equipment.

Benefits: Covers the vehicle with rich, polish foam that washes away dirt and road grime, while conditioning the finish for wax or sealant treatments. Can also be used as a colored foam detergent. Universally safe for all finishes.

Packaging: 5-gallon cube

Dilution:

Direct Feed: Apply 1/4 ounce (approx. 5-8ml) of product per vehicle.

Stock Solution: Pre-Dilute CW-2031-5 TRI-FOAM BLUE approx. 4:1 ratio. Using Hydro-Minder 511 pink tip (240:1).

Final Dilution: 1200:1 (Will vary depending on car wash equipment)

Specifications:

Appearance:	A thin dark blue liquid
Fragrance:	none
Ph:	6.76-6.96
Density:	8.61-8.81 lbs/gal
Emulsifier:	Nonionic/Anionic
DOT Labeling:	Cleaning Liquid

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Car Wash Products

FACT SHEET

Name: CW-2032-5 TRI-FOAM **GOLD** POLISH FOAM/CONDITIONER
CONCENTRATE

Description: This highly concentrated; liquid polish foam/conditioner is formulated for use in automatic car wash foam generating equipment.

Benefits: Covers the vehicle with rich, polish foam that washes away dirt and road grime, while conditioning the finish for wax or sealant treatments. Can also be used as a colored foam detergent. It's universally safe for all finishes.

Packaging: 5-gallon cube

Dilution:

Direct Feed: Apply 1/4 ounce (approx. 5-8ml) of product per vehicle.

Stock Solution: Pre-Dilute CW-2032-5 TRI-FOAM GOLD approx. 4:1 ratio. Using Hydro-Minder 511 pink tip (240:1).

Final Dilution: 1200:1 (Will vary depending on car wash equipment)

Specifications:

Appearance:	A thin dark gold liquid
Fragrance:	none
Ph:	6.76-6.96
Density:	8.61-8.81 lbs/gal
Emulsifier:	Nonionic/Anionic
DOT Labeling:	Cleaning Liquid

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Car Wash Products

FACT SHEET

Name: CW-2033-5 TRI-FOAM **RED** POLISH FOAM/CONDITIONER
CONCENTRATE

Description: This highly concentrated; liquid polish foam/conditioner is formulated for use in automatic car wash foam generating equipment.

Benefits: Covers the vehicle with rich, polish foam that washes away dirt and road grime, while conditioning the finish for wax or sealant treatments. Can also be used as a colored foam detergent. It's universally safe for all finishes.

Packaging: 5-gallon cube

Dilution:

Direct Feed: Apply 1/4 ounce (approx. 5-8ml) of product per vehicle.

Stock Solution: Pre-Dilute CW-2033-5 TRI-FOAM RED approx. 4:1 ratio. Using Hydro-Minder 511 pink tip (240:1).

Final Dilution: 1200:1 (Will vary depending on car wash equipment)

Specifications:

Appearance:	A thin dark red liquid
Fragrance:	none
Ph:	7.70-7.90
Density:	8.63-8.83 lbs/gal
Emulsifier:	Nonionic/Anionic
DOT Labeling:	Cleaning Liquid

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Car Wash Products

FACT SHEET

Name: CW-2081-5 DRYING AID

Description: A super concentrated liquid rinse aid that assists in drying and sealing finishes for use in automatic car washes before or as the final rinse.

Benefits: Helps water bead, separate and sheet off vehicle for faster drying with less toweling. Won't smear or impair vision on windshields. One 5-gallon cube can treat up to 5,000 cars.

Packaging: 5-gallon cube

Dilution:

Direct Feed: Apply 1/8 to 1/4 ounces (approx. 3-7 ml) of product per vehicle.

Stock Solution: Pre-Dilute CW-2081-5 DRYING AID approx. 10:1 ratio. Using Hydro-Minder 511 pink tip (240:1).

Final Dilution: 2400:1 (Will vary depending on car wash equipment)

Specifications:

Appearance:	Clear thin amber liquid
Fragrance:	Typical/Alcohol fragrance
Ph:	4.83-4.93
Density:	8.18-8.28 lbs/gal
Emulsifier:	Cationic
DOT Labeling:	Combustible Liquid, N.O.S. (PGIII) (Contains Isopropyl Alcohol)

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Car Wash Products

FACT SHEET

Name CW-2082-5 SEALER WAX

Description A super concentrated liquid rinse wax that assists in drying and sealing finishes for use in automatic car washes before or as the final rinse.

Benefits Helps reduce water spotting while enhancing shine and gloss. Highly concentrated (2400-to-1) for maximum cost effectiveness.

Packaging 5-gallon cube

Dilution

LOW VOLUME: Apply 1/16 to 1/8 ounces (approx. 2-4 ml) of product per vehicle.

HIGH VOLUME: Dilute 5 gallons of SEALER WAX with 50 gallons of water (10:1) in a 55- gallon drum. Adjust draw to approx. ¼ oz. To 1 oz. (7 to 29 ml) per vehicle.

STOCK SOLUTION: Pre-Dilute CW-2082-5 SEALER WAX approx. 10:1 ratio. Using Hydro-Minder 511 pink tip (240:1).

FINAL DILUTION: 2400:1 (Will vary depending on car wash equipment)

Specifications:

Appearance:	Clear thin amber liquid
Fragrance:	Typical/Alcohol fragrance
Ph:	4.73-4.93
Density:	8.14-8.34 lbs/gal
Emulsifier:	Cationic
DOT Labeling:	Cleaning Liquid