

# PRIMATECH

PT1107B

## COOLANT REFERENCE GUIDE



**ADVANCED COOLANTS FOR ALL  
HEAVY DUTY ON AND OFF-ROAD APPLICATIONS  
GUARANTEED TO MEET OR EXCEED COMMERCIAL  
ENGINE MANUFACTURER'S INDUSTRY STANDARDS**



# EXTENDED LIFE CONCENTRATE



**GALLON**  
P/N: PTAF-2301F

**DRUM**  
P/N: PTAF-2355F

- For Trucks And All Heavy Duty Engines, On And Off Road.
- New Anti-Corrosion Formula Nitrated Organic Acid Technology Has Potential of 5 year, 600,000 Mile Life.
- Meets Truck Specifications **Mack - Volvo - Navistar Cummins 90T8-4 - Caterpillar EC-1 Detroit Diesel 7SE 298.**
- Formulated To Satisfy **ASTM D3306 & D6210 SAE J1941 & J1034 - TMC RP-329.**

# PRODUCT SPECIFICATIONS

This product is formulated with the latest organic acid technology and is "pre-charged" creating a high quality extended life ethylene glycol anti-freeze/coolant for heavy duty use. Its special blend of long-lasting inhibitors is designed to protect all engine components, including aluminum, for a minimum of 5 years, or 600,000 miles, when used as directed.

### TYPICAL COMPOSITION

Ethylene Glycol - Anti-Freeze Grade  
Corrosion Inhibitors - Some Hydrated  
Total Water - ASTM D1123  
Anti-Foam And Dye

### PERCENT BY WEIGHT

95.0%  
4.0 Maximum  
4.0 Maximum  
Included

### TYPICAL PROPERTIES

Color  
Clarity  
Specific Gravity - 60/60° C - ASTM DD1122  
PH 50% By Volume - ASTM 1287  
Flash Point - Tag Open Cup - ASTM 1310  
Ash - ASTM D1119  
Foam Test - ASTM D1881  
Foam Volume  
Break Time  
**Boiling Point** - ASTM D1120  
100% By Volume  
50% By Volume  
**Freezing Point** - ASTM D1177 - 50% By Volume  
Reserve Alkalinity - ASTM D1121

Red  
Clear - Single Phase  
1.12 - 1.14  
8.0 Min.  
250° F  
0.35% by Weight Maximum

50 Milligrams Maximum  
2 Seconds

328° F Minimum  
226° F Minimum  
-34° Maximum  
4 Minimum

### GENERAL INFORMATION

**Use Recommendation** – For long life and best corrosion protections, the coolant mix should be 50° PRIMATECH Extended Life combined with pure, clean water. Note: If water condition is questionable, we recommend distilled water. This provides freezing protection to -34° F, and boil-over protection to +265° F, using a 15 pound pressure radiator cap. For extreme conditions, PRIMATECH Extended Life can be used to a maximum of 70%, providing freezing protection to -84° F and boil-over protection to +276° F. Note: Do not use more than 70% concentration of anti-freeze. Using poor quality water, or combining with conventional anti-freeze, reduces the effective life of the coolant to 24,000 miles, or two year, whichever comes first.

**Applicable Specification** – Exceeds the requirements of ASTM D3306, ASTM D6210, TMC RP329, SAE J1034, and SAE J1941: satisfies both hot surface aluminum protection requirements of ASTM D4340 and Cummins heavy duty low silicate requirements, and is compatible with current heavy duty extended life products of other major producers.

**Hoses And Gaskets** – No adverse effect on gaskets, hoses, or automotive finishes.

**Cautionary Information** – Ethylene Glycol, the major components in PRIMATECH Extended Life, is poisonous to humans and animals when ingested. Store only in closed containers with complete cautionary warning information thereon, in a cool, secure place, out of the reach of children. Do not use in any system connected with potable water.

# EXTENDED LIFE READY-TO-USE



**GALLON**  
P/N: PTAF-2301R

**DRUM**  
P/N: PTAF-2355R

	ASTM D1384		ASTM D2570	
	Max. Loss Allowed	PrimaTech Ext. Life	Max. Loss Allowed	PrimaTech Ext. Life
COPPER	10	0	20	1
SOLDER	30	2	60	2
BRASS	10	0	20	1
STEEL	10	0	20	1
CAST IRON	10	0	20	1
ALUMINUM	30	0	60	10

# HEAVY DUTY SCA CONCENTRATE



**GALLON**  
P/N: PTAF-2201F

**DRUM**  
P/N: PTAF-2255F

- Truck Formulation With Low Silicate Content.
- SCA Pre-Charged Fully Formulated, Fuchsia Color.
- Full Strength Ethylene Glycol For Summer & Winter Protection.
- Meets Truck Specifications Mack - Cummins - Kenworth Peterbilt - Freightliner Detroit Diesel & John Deere JDM.
- Formulated To Satisfy ASTM D6210 & D4985 SAE J1941 & J1034 - TMC RP-329.

# HEAVY DUTY SCA READY-TO-USE



**GALLON**  
P/N: PTAF-2201R

**DRUM**  
P/N: PTAF-2255R

# PRODUCT SPECIFICATIONS

This product is a fully formulated heavy duty anti-freeze/coolant requiring no additive (SCA) precharge. It provides corrosion protection for all heavy duty coling systems and is compatible with anti-freeze/coolants of all major producers.

## TYPICAL COMPOSITION

Ethylene Glycol - Anti-Freeze Grade  
Corrosion Inhibitors - Some Hydrated  
Total Water - ASTM D1123

## PERCENT BY WEIGHT

95.0%  
4% Maximum  
3% Maximum

## TYPICAL PROPERTIES

Color  
Odor  
Specific Gravity - 60/60° C - ASTM DD1122  
PH 50/50 By Volume - ASTM 1287  
Total Water - D1123  
Total Glycols - E202  
Flash Point COC - D92  
Foam Test - ASTM D1881  
**Boiling Point** - ASTM D1120  
**Freezing Point** - ASTM D1177 - 50/50 Solution  
Aluminum Corrosion Protection Pass

Fuchsia  
Mild  
1.110 - 1.115  
10.4  
3% Maximum  
97% Minimum  
250° F Minimum  
45 m/2.7 Sec. Maximum  
327° F (163° C)  
-34° Maximum  
ASTMD4340

## GENERAL INFORMATION

**Use Recommendation** – This Ethylene Glycol based anti-freeze/coolant should not be used in concentrated form in your vehicle. A 50% dilution is generally recommended for best balanced protection against corrosion and summer boiling. Do not dilute to less than 33 1/3%. Note: Maximum freeze protection is at 68% if required. Water quality is an important factor affecting the long-term corrosion protection of any anti-freeze. Avoid use of contaminated or heavily chlorinated water. Use of additional cooling system additives is not needed and is specifically discouraged.

**Applicable Specification** – Exceeds the requirements of ASTM D4985, ASTM D6210, SAE J1941 and TMC RP329. Satisfies both hot surface aluminum protection requirements of ASTM test D4340 and Cummins heavy duty low silicate requirements.

**Hoses And Gaskets** – No adverse effect on gaskets, hoses, or automotive finishes.

**Cautionary Information** – Ethylene Glycol, the major components in PRIMATECH Extended Life, is poisonous to humans and animals when ingested. Store only in closed containers with complete cautionary warning information thereon, in a cool, secure place, out of the reach of children. Do not use in any system connected with potable water.

	ASTM D1384		ASTM D2570	
	Max. Loss Allowed	PrimaTech Ext. Life	Max. Loss Allowed	PrimaTech Ext. Life
COPPER	10	2	20	14
SOLDER	30	4	60	18
BRASS	10	2	20	14
STEEL	10	2	20	3
CAST IRON	10	2	20	2
ALUMINUM	30	5	60	10

# UNIVERSAL CONCENTRATE



**GALLON**  
P/N: PTAF-2101F

**DRUM**  
P/N: PTAF-2155F

- **Advanced Corrosion Protection:**  
Unique low silicate formula protects all cooling system materials - especially aluminum - for cars and light duty trucks.

- **Meets Car And Truck Specifications:**  
Meets ASTM D-3306, D4340 - critical hot surface aluminum tests - D4985 trucks - SAE J1034 and J1941.

- **Maximum Protection:**  
Premium formulation for both winter and summer cooling system protection.

# UNIVERSAL READY-TO-USE



**GALLON**  
P/N: PTAF-2101R

**DRUM**  
P/N: PTAF-2155R

## PRODUCT SPECIFICATIONS

This Universal product meets or exceeds performance requirements for both car and truck cooling systems, including those with aluminum heat-rejecting components such as aluminum cylinder heads, water pumps, and radiators. It provides corrosion protection for all cooling system metals and is compatible with antifreeze/coolants of all major manufacturers.

### TYPICAL COMPOSITION

Ethylene Glycol - Anti-Freeze Grade  
Soluble Corrosion Inhibitors  
Total Water - ASTM D1123  
Anti-Foam And Dye

### TYPICAL PROPERTIES

Color  
Clarity  
Specific Gravity - 60/60° C - ASTM D1122  
Reserve Alkalinity - ASTM D1121  
PH 50% By Volume - ASTM 1287  
Flash Point - Tag Open Cup - ASTM 1310  
Ash - ASTM D1119  
Foam Test - ASTM D1881  
Foam Volume  
Break Time  
**Boiling Point** - ASTM D1120  
33.33% By Volume  
50% By Volume  
100% By Volume  
**Freezing Point** - ASTM D1177  
33.33% By Volume  
50% By Volume  
60% By Volume  
100% By Volume

### PERCENT BY WEIGHT

95.0%  
3.0 Maximum  
3.2 Maximum  
Trace

Fluorescent Green  
Clear - Single Phase  
1.110 - 1.145  
6 - 7  
7.5 - 11.0  
250° F  
1% by Weight Maximum

50 Milligrams Maximum  
3.0 Seconds

220° F Minimum  
226° F Minimum  
325° F Minimum

0° F Maximum  
-34° F Maximum  
-62° F Maximum  
-4° F Maximum

### GENERAL INFORMATION

**Use Recommendation** – Do not use in concentrated form in your vehicle. A 50% dilution is generally recommended for best balanced protection against corrosion and summer boiling. Do not dilute to less than 33 1/3%. Note: Maximum freeze protection is at 68% if required. Water quality is an important factor affecting the long term corrosion protection of any anti-freeze. Avoid use of contaminated or heavily chlorinated water. Use of additional cooling system additives is not needed in automotive systems and is specifically discouraged.

**Applicable Specification** – Exceeds the requirements of ASTM D3306, ASTM D4985, SAE J1034, and SAE J1941, Federal Specification OA548D: satisfies both hot surface aluminum protection requirements of ASTM test D4340 and Cummins heavy duty low silicate requirements, and is designed to meet the requirements of GM1825M, GM1899M, Chrysler MS7170, and Ford ESEM97B44A.

**Hoses And Gaskets** – No adverse effect on gaskets, hoses, or automotive finishes.

**Cautionary Information** – Ethylene Glycol, the major components in PRIMATECH Universal Green, and is poisonous to humans and animals when ingested. Store only in closed containers with complete cautionary warning information thereon, in a cool, secure place, out of the reach of children. Do not use in any system connected with potable water.

	ASTM D1384		ASTM D2570	
	Max. Loss Allowed	PrimaTech Ext. Life	Max. Loss Allowed	PrimaTech Ext. Life
COPPER	10	0	20	4
SOLDER	30	7	60	17
BRASS	10	0	20	3
STEEL	10	1	20	2
CAST IRON	10	1	20	2
ALUMINUM	30	0	60	3

# PRIMATECH

## ADVANCED COOLANTS FOR ALL HEAVY DUTY ON AND OFF-ROAD APPLICATIONS

### CHEMICAL & APPLICATION REFERENCE CHART



COLOR	RED	RED	FUCHSIA	FUCHSIA	GREEN	GREEN
MIXTURE	Concentrate	50/50	Concentrate	50/50	Concentrate	50/50
PRIMATECH BRAND	Extended Life	Extended Life	Heavy Duty PreCharged	Heavy Duty PreCharged	Universal Green	Universal Green
GALLON P/N	PTAF-2301F	PTAF-2301R	PTAF-2201F	PTAF-2201R	PTAF-2101F	PTAF-2101R
DRUM P/N	PTAF-2355F	PTAF-2355R	PTAF-2255F	PTAF-2255R	PTAF-2155F	PTAF-2155R
APPLICATION	Diesel	Diesel	Heavy Duty Universal	Heavy Duty Universal	Heavy Duty Universal	Heavy Duty Universal
CHANGE INTERVAL	600,000 Mi. w/Entender	600,000 Mi. w/Entender	Life w/SCA's Every 30,000	Life w/SCA's Every 30,000	2 Years 24,000 Miles	2 Years 24,000 Miles
BASE	EG	EG	EG	EG	EG	EG
NITRATES	NO	NO	2800 ppm	2800 ppm	NO	NO
PHOSPHATES	None	None	None	None	2090 ppm	2090 ppm
SILICATES	None	None	< 250 ppm	< 250 ppm	< 250 ppm	< 250 ppm
PH LEVEL	8	8	10 - 11	10 - 11	8	8

FOLLOW DIRECTIONS ON PRODUCT LABEL.

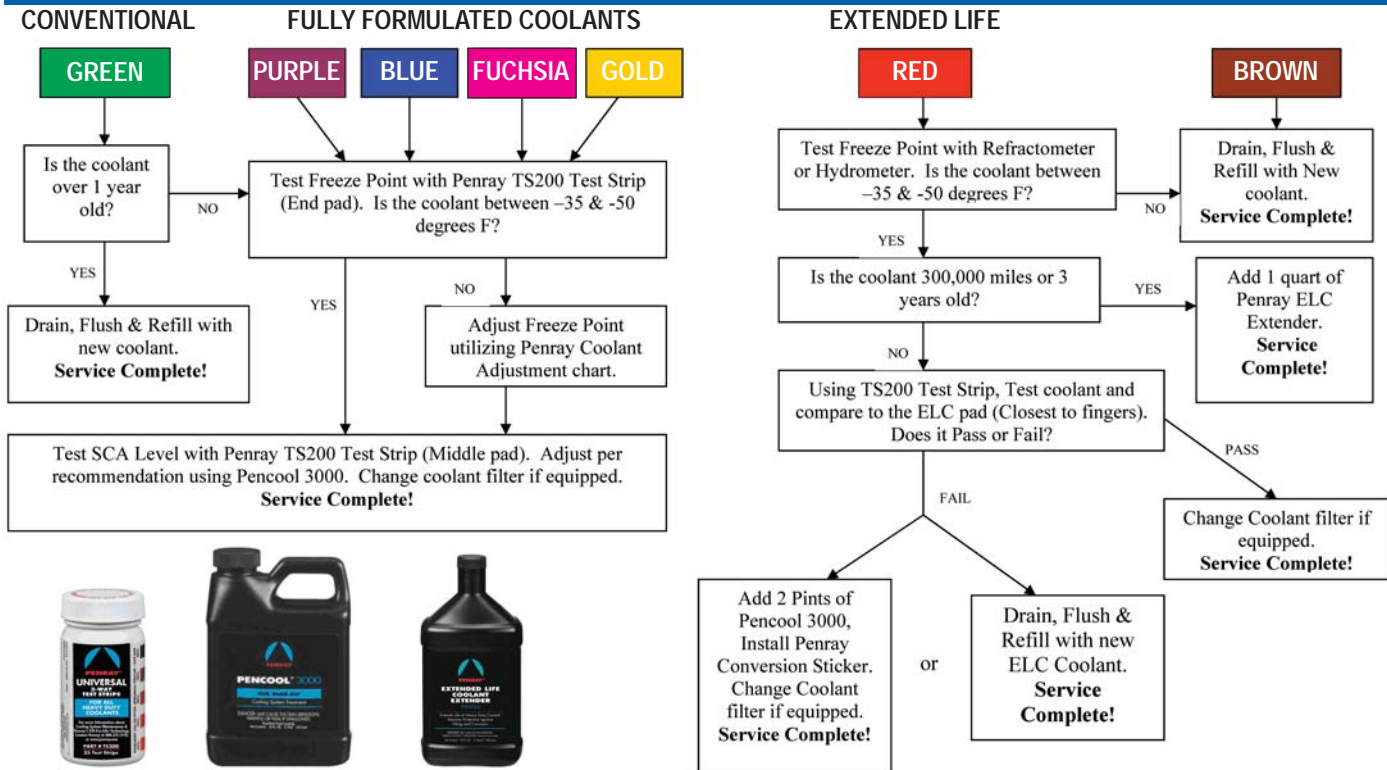
**DON'T POLLUTE!** Conserve resources. Dispose of container in proper collection manner.

**CAUTION:** OVER EXPOSURE TO PRODUCT MAY CAUSE EYE, SKIN OR RESPIRATORY IRRITATION. KEEP AWAY FROM CHILDREN.

**WARNING!** Avoid prolonged contact. Wash skin thoroughly with soap and water after use. Launder or discard soiled clothing. Empty container retains vapors and/or residue. Do not cut or weld on or near container or expose other sources of heat or ignition. Container may explode and cause injury or death.

# PRIMATECH

## COOLANT REFERENCE MAINTENANCE CHART



## ANTI-FREEZE MIXTURE REFERENCE CHART

COOLING SYSTEM CAPACITY	QUARTS OF ANTI-FREEZE REQUIRED FOR PROTECTION TO TEMPERATURES (°F) SHOWN BELOW										
	IN QUARTS	2	3	4	5	6	7	8	9	10	11
10	16°	4°	-12°	-34°	-62°						
11	18°	8°	-6°	-23°	-47°						
12	19°	10°	0°	-15°	-34°	-57°					
13	21°	13°	3°	-9°	-25°	-45°					
14	22°	15°	6°	-5°	-18°	-34°	-54°				
15	23°	16°	8°	0°	-12°	-26°	-43°	-62°			
16	23°	17°	10°	2°	-8°	-19°	-34°	-52°			
17	24°	18°	12°	5°	-4°	-14°	-27°	-42°	-58°		
18	24°	19°	14°	7°	-0°	-10°	-21°	-34°	-50°		
19	25°	20°	15°	9°	2°	-7°	-16°	-28°	-42°	-56°	
20	25°	21°	16°	10°	4°	-3°	-12°	-22°	-34°	-48°	
21		22°	17°	12°	6°	0°	-9°	-17°	-28°	-41°	
22		22°	18°	13°	8°	2°	-6°	-14°	-23°	-34°	
23		23°	19°	14°	9°	4°	-3°	-10°	-19°	-29°	
24		23°	19°	15°	10°	5°	0°	-8°	-15°	-24°	
25		24°	20°	16°	12°	7°	1°	-5°	-12°	-20°	

BOILING POINT OF 50% MIXTURE = 226°