

A Report to the Public on ANTARCTIC ANTIFREEZE

Here are the **FACTS** You Need to Know!

An intelligent selection of the Anti-freeze to be used in your car, based upon genuinely authoritative information IS important to you.

When you put a Permanent-type Antifreeze solution in the cooling system of your car you do it for protection... a precaution against freezing and its damaging effects for an entire season... you have a right to expect that protection.

Furthermore, you

have a right to expect that no damage will result to your car because of the use of the Antifreeze you have selected.

The authoritative statements of reliable experts and users of ANTARCTIC ANTIFREEZE reproduced here give you trustworthy evidence that it will give you desirable and satisfactory protection when used as directed.

The result of painstaking experiments and months

of careful research and development, ANTARCTIC is a safe, dependable and trouble-free, all-winter protection for your car.

Manufactured from non-critical war materials under expert supervision and to strictly maintained standards of quality, it meets every requirement for satisfactory performance. Proved on the road and in the laboratory, under the most severe conditions, it has shown itself to be a superior Permanent-type Antifreeze.

★ As credible evidence of the quality and performance of ANTARCTIC Antifreeze, the manufacturers are pleased to reproduce facsimiles of a few letters from reliable sources of recognized integrity.

Winterline Manufacturing Company,
108-109 Wagon Market,
Denver, Colorado.

Gentlemen:

We have been using Antarctic Antifreeze in two of our heavy duty International Trucks. Your antifreeze has been in one of these trucks for approximately six months and in the other for about five months. We expect to let it remain in both trucks on through the summer months.

During the cold season we were especially well pleased with Antarctic because, as you know, warm days occur in Denver during the winter and it had been our experience with the antifreeze that we were using previously that it would heat up and boil away, but with Antarctic we had no difficulty.

During these summer months we find that our trucks run cool with Antarctic in the cooling system so we see no reason to drain it.

You may count on among your permanent customers.

Very truly yours,

THOS. WILLIAMS AND SONS,
By Clint Williams

Winterline Manufacturing Company,
Denver, Colo.

Gentlemen:

In February of 1942 we purchased a 50 Gallon Drum of Antarctic Antifreeze for use in our truck and stationary power equipment. Our mining operations are located about fifteen miles from Encampment, Wyo., at an elevation of more than 8,000 feet above sea level.

Antarctic Antifreeze was used from the time we made our purchase until the summer months with following equipment:

1-70 Horse Power Minn. Moline C.U. Power Unit.
1 Buick Motor Powering a 170 Ft. Air Compressor.
1942 Chevrolet Truck and in 1937 La Salle Car.

In all of this equipment your Antifreeze was added with a 50/50 mixture of water. As you perhaps know temperatures in this locality go as low as 30 degrees below zero. During the period that we used your Antifreeze the temperature frequently went to 30 degrees below zero and on one or two occasions went approximately 50 degrees below zero.

We found Antarctic Antifreeze highly satisfactory under the severe conditions outlined above.

Very truly yours,
Paul A. Hunschke
GOLDEN CLOVER MINING COMPANY, INC.

Winterline Manufacturing Company,
108-109 Wagon Market,
Denver, Colorado.

Gentlemen:

We wish to herewith report the results of a series of corrosion tests which we have made on a sample of Antarctic Antifreeze and Antifreeze submitted by your company.

For the purpose of carrying out these tests, identical samples of copper, aluminum, solder and iron were placed in each of these antifreeze materials and the materials were maintained at a boiling temperature for approximately one week. After one week of boiling, the samples were removed from the solution, weighed and examined for evidence of corrosion. We find that in the case of both of these solutions the amount of corrosion produced is negligible. The Antarctic has more effect upon the solder than does the Antifreeze. Copper is affected about the same by both of these materials. Aluminum is affected more by the Antarctic material than the Antifreeze and iron is also more affected by the Antarctic material.

As stated, neither of these materials corrodes the metals to any appreciable degree which would lead to the conclusion that they would be harmful to metals. In view of this fact, it is our opinion that either of these two materials is entirely satisfactory as an antifreeze material from the standpoint of not corroding the metal which would occur in the cooling system of the automobile.

Respectfully submitted,

KANSAS CITY TESTING LABORATORY,
By J. G. Hawthorne

Golden, Colorado, August 7, 1942.
Report on the Investigation of the Corrosive Properties of Winterline Antarctic Antifreeze

Corrosion tests on steel, copper, zinc, aluminum, lead and tin were made with Winterline Antarctic and a well known brand of antifreeze in the laboratory. The temperature was controlled at 175° F. while the liquids were mechanically agitated. Test pieces of the metals were mounted in two positions in each antifreeze mixture: one set completely submerged, the other set 80% submerged at the liquid line. The tests were carried out with liquid line at 175° during the day for 12 hours and allowed to cool to room temperature at night. This was done to make the tests similar to automobile operation.

The extent of corrosion was determined by the changes in weight of the metals. Examination was made for pitting and waterline corrosion. The losses in weight of the 6 metals placed in the Winterline Antarctic Antifreeze were small, averaging about 1/10 of 1%. The total loss in weight of all the metals was less in the Winterline Antarctic than in a well known brand of antifreeze which was used for comparison. There was no evidence of waterline corrosion which was probably due to protection by the inhibitor in the antifreeze. Some evidence of pitting, noted on two of the metals in both antifreezes, was not considered to be particularly harmful. After the test the Winterline Antarctic showed no sediment, remaining clear and colored like the unused material.

Under the conditions as set up in the laboratory, the metals mentioned above showed little corrosion in Winterline Antarctic Antifreeze and compared favorably with the results obtained by corresponding tests with a well known brand of antifreeze.

Robert J. Phelps

GUARANTEE

When used in normal water cooling systems of combustion engines, ANTARCTIC is guaranteed: To protect the cooling system against freezing. To be non-inflammable and non-injurious to car finishes or rubber. To protect against corrosion, rust, clogging of radiator and deterioration.

This Guarantee, backed by an Old Line Casualty Insurance Co., is plainly printed on the label of the Duraglass container and is fully effective when directions are explicitly followed.

THESE DIRECTIONS MUST BE FOLLOWED WHEN INSTALLING ANTARCTIC PROTECTION

Guarantee Not Valid Unless Followed



1 DO NOT MIX ANTIFREEZES
ANTARCTIC ANTIFREEZE must not be used with any other antifreeze, nor with anything but clean water in the cooling system. It is not to be used in any cooling system which contains a steam heater as an integral part of the system. It can be used satisfactorily in a cooling system in which a hot water heater is connected.



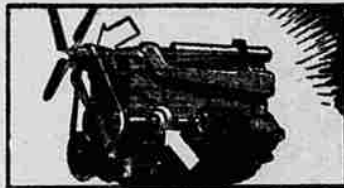
4 CHECK HOSE CONNECTIONS
Be sure all hose is tight to prevent freeze leakage. Your dealer should retighten hose, if possible, so worn particles clog radiator or thermostat. Make sure thermostat is working properly. Every hose must be absolutely tight and leak



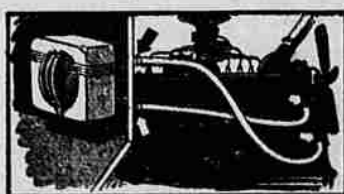
2 CLEAN THE RADIATOR
Rust, scale and dirt cause poor circulation and over-heating. Antifreeze is lost, engine may be damaged. Have your dealer clean and check radiator for leaks. Have radiator repaired if it shows signs of leaking. This work should be done by a competent radiator repair shop.



5 TIGHTEN CYLINDER BOLTS
Looseness of the head bolts and expansion valves on the cylinder block often causes leaks. Your dealer should use a torque wrench to make sure that all the head bolts are tight. Replace worn head gaskets and expansion plugs.



3 EXAMINE WATER PUMP AND FAN
Water pumps should be tight to prevent leakage. Leaks in pump frequently develop along propeller shaft. Have dealer check pump and repair worn or faulty parts. If the fan belt is worn or slipping, it should be taken up. If it's too badly worn, get a new one.



6 CHECK THE HEATER
The feed lines should drain without any high points to trap air. When the cooling system has been refilled, start the engine and open the valve at the top of the heater to remove all air pockets. Heaters are often a source of leakage and waste.

ASK YOUR LOCAL DEALER TO INSTALL ANTARCTIC ACCORDING TO DIRECTIONS and ENJOY REAL ANTI-FREEZE PROTECTION...



ANTARCTIC

MANUFACTURED BY WINTERLINE

See Your Local Dealer

ANTIFREEZE

ACTING CO., DENVER, COLO.

to our records

following:

us invoice in

Very

M. H.

By