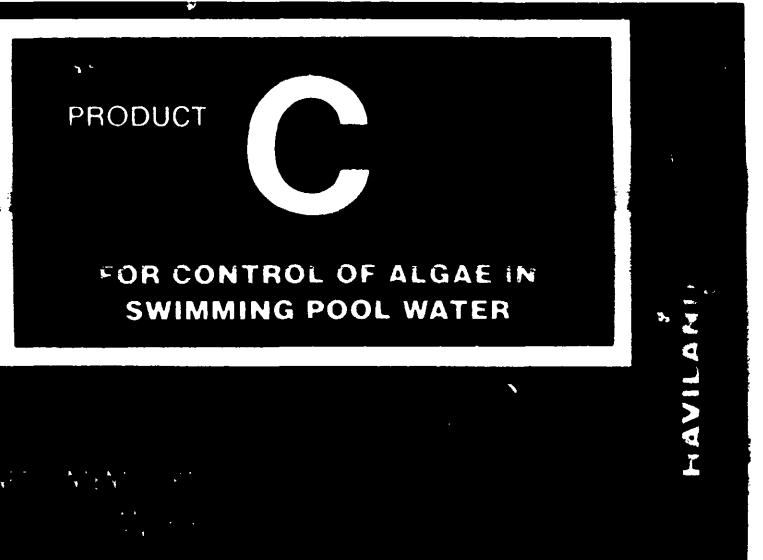
Some Hints from



HAVILAND

W

"How to Winterize your Pool"

POOL "WINTERIZATION"

Many pools are improperly cared for during the winter and become needlessly damaged. Therefore, winter pool care is very important. Improper winter pool care means your pool walls could bend or crack. Pumps, heaters, filters and pipes could also break if not properly cared for. Proper pool care during the winter can eliminate most of these problems.

The best way to begin winterizing your pool is to check with your pool builder. Whether your pool is above or below ground, your pool builder or pool supplier should be the most competent person to advise you on how to protect your pool during the winter.

The following information is intended to serve as a guide to the major steps needed to protect your swimming pool during winter.

Most pools are winterized with a certain amount of water in them. This is necessary to equalize the water pressure in the pool with the freezing water in the ground around it. Freezing water, however, can become a serious problem. Since water freezes from the top down "hydrostatic pressure" is exerted on the water trapped under the ice. This pressure usually releases itself by cracking the ice. By January, however, the ice can be very thick and even become stronger than the pool walls. The hydrostatic pressure at this point would probably crack the walls rather than the ice. To eliminate this problem, the pressure must be released. You can release the pressure by introducing tires, ice pillows or other pressure release devices into the pool before the ice freezes. These objects weaken the ice surface. The ice then cracks and releases the hydrostatic pressure so that it will not crack the pool walls.

HOW TO WINTERIZE YOUR POOL

I. WATER LEVEL

A. Above-Ground Pools

With an above-ground pool, the procedure for winterizing varies with the construction strength. It is important that you follow the manufacturer's recommendations. Generally, small pools should be completely emptied for the winter, Larger pools, which are strong enough to withstand winter conditions, are usually winterized with a portion of the water left in the pool. Before beginning winterization on such pools, leaks in the liner must be repaired and wrinkles smoothed out. The water level is then reduced 6 to 8 inches below the water return line. Leave the rest of the water in the pool to help support the walls during the winter months. Even though ice pillows or tires are used to release hydrostatic pressure, the walls of the pool should be allowed to expand out as the water inside freezes. Therefore, NO permanent restraints, like concrete patios, should be allowed to hold the walls in during the winter, Otherwise, the freezing water could damage the pool valls.

II. PIPES AND PLUMBING

Drain all pipes and plumbing if they are above the frost line in order to prevent them from cracking, as the water freezes. Before draining, however, make sure that the pool electrical system is turned off. If you run the pump after the pipes are drained, it could ruin the pump. Then proceed to drain the pipes, filter, pump and heater.

If the equipment can be easily removed (as is the case in many above-ground pools) it should be moved inside and stored in a dry place. Generally, it is a good idea to plug skimmers and the water return lines with water-tight plugs to prevent water from entering the lines during the winter.

III. ACCESSORIES

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Product A: After the water level in the pool has been lowered, a ring of dirt and oil usually remains. This ring should be cleaned using Product A. Product A is expecially formulated to rid your pool of this unsightly ring. Use Product A according to the instructions on the label, under GENERAL MAINTENANCE.

Product B: Product B is designed to give your pool water a protective chlorine residual. This will prevent the growth of bacteria throughout the winter, Apply Product B to the pool water by sprinkling the entire contents of the container evenly over the top of the water. Try to get uniform distribution.

Product C: Product C is a chemical designed to kill existing algae. In addition, it provides sufficient residual to prevent the growth of algae that might enter the pool water during the winter. Empty entire contents of Product C into a pail of water, Pour mixture into the pool water. Try to obtain an even distribution, as with Product B.

Pool construction materials are not themselves adversely affected by freezing temperatures. The danger to the pool comes from freezing water. When water freezes, it increases its volume by about 10% and few materials are capable of containing the pressure of this increase in volume. Pool walls are certainly no exception. They can break or bend if the pool is not properly winterized.

B. In-Ground Pools

There are two areas of concern with freezing water on this type of pool. There is the water in the pool itself, which should be kept in the pool, especially in the winter, and there is the water in the ground around the pool. The water in the ground is of primary concern. This freezing ground water exerts tremendous forces *inward* on the pool walls. Allowing water to remain in the pool helps equalize the forces exerted on the pool walfs from the ground water.

To assure that pool accessories are not destroyed by the ice, the water level in the pool must be lowered to at least three (3) inches below the water return lines. Lowering the water protects decorative tile, skimmers and the pool lights. Lowering the water allows all pipes to be drained below the winter "frost line". The "frost line" is the depth to which the ground freezes during the winter (in most of Michigan it is approximately 42" beneath the surface). For further information pertaining to your area, consult your local building inspector.

DIRECTIONS

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If possible, remove all accessories from the pool such as ladders and hand rails. Lights, however, can be difficult. Only certain types of pool lights can be removed. Consult the pool builder or specifications before removing. The diving board, especially if any part of it is wood, should be removed and stored carefully so as to avoid warping.



IV. CHEMICAL TREATMENT

Chemical Treatment of the pool water is extremely important. Proper chemical treatment will keep the water pure and clean throughout the winter. The Haviland "ABC" Winterizing Kit is designed to give you the proper chemical treatment for winterizing your pool.

Before using the Winterizing Kit, be sure that the pool is free of visible algae, and that the pH of the water is within the range of 7.2.7.6.

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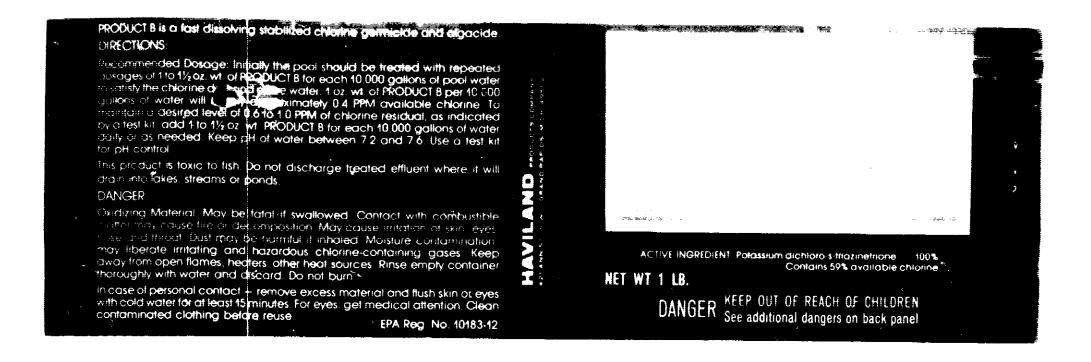
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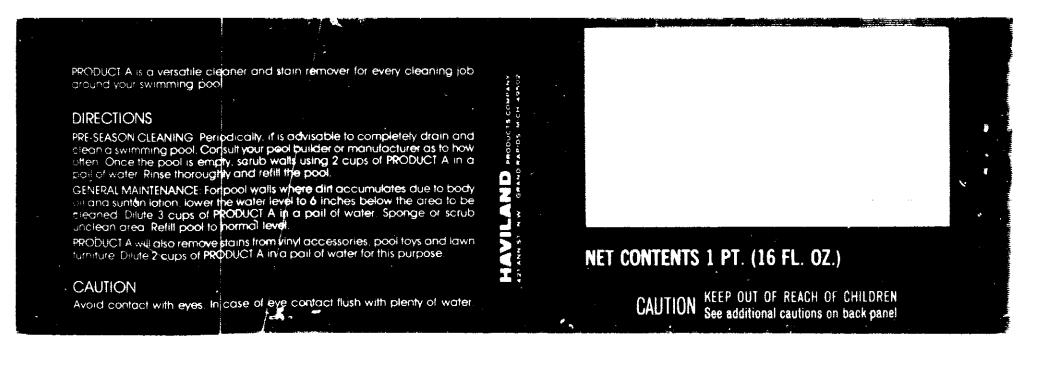


V. COVERING

Covering your swimming pool in the fall, is one of the most economical practices we can recommend. When you cover your pool, leaves and dirt are kept from entering the pool. This means that when you uncover your pool in the spring, the water will be clear and the pool will require less work and chemical treatment in order to prepare it for swimming, Some cover manufacturers suggest you plug the return lines and add water to the pool to support the cover. For any further information concerning pool care, chemicals or covers, see or call your authorized Haviland Dealer,







PRODUCT B is a fast dissolving stabilized chlorine germicide and algocide. DIRECTIONS:

Recommended Dosage: Initially the pool should be treated with repeated dosages of 1 to 1½ oz. wt. of PRODUCT B for each 10,000 gallons of pool water to satisfy the chlorine data and each e water. 1 oz. wt. of PRODUCT B per 10,000 gallons of water will satisfy data similarly 0.4 PPM available chlorine. To maintain a desired level of 0.6 to 1.0 PPM of chlorine residual, as indicated by a test kit, add 1 to 1½ oz. wt. PRODUCT 8 for each 10,000 gallons of water daily or as needed. Keep pH of water between 7.2 and 7.6. Use a test kit for pH control.

This product is toxic to fish. Do not discharge treated effluent where it will drain into lakes, streams or ponds.

DANGER:

Oxidizing Material: May be fatal if swallowed. Contact with combustible matter may cause fire or decomposition. May cause irritation of skin, eyes, nose and throat. Dust may be harmful if inhaled. Moisture contamination may liberate irritating and hazardous chlorine-containing gases. Keep away from open flames, hedters, other heat sources. Rinse empty container thoroughly with water and discard. Do not burn.

In case of personal contact + remove excess material and flush skin or eyes with cold water for at least 15 minutes. For eyes, get medical attention. Clean contaminated clothing before reuse.

EPA Reg. No. 10183-12

PRODUCT A is a versatile cleaner and stain remover for every cleaning job around your swimming pool.

DIRECTIONS

PRE-SEASON CLEANING: Periodically, it is advisable to completely drain and clean a swimming pool. Consult your pool builder or manufacturer as to how often. Once the pool is empty, scrub walk using 2 cups of PRODUCT A in a pall of water. Pipes there walk and reful the pool.

pall of water. Rinse thoroughly and refill the paol. GENERAL MAINTENANCE: For pool walls where dirt accumulates due to body oil and suntan lotion, lower the water level to 6 inches below the area to be cleaned. Dilute 3 cups of PRODUCT A in a pail of water. Sponge or scrub unclean area. Refill pool to normal level.

PRODUCT A will also remove stains from frinyl accessories, pool toys and lawn furniture. Dilute 2 cups of PRODUCT A in/a pail of water for this purpose.

CAUTION

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