

PM 32

278-64

7/6/93

129/84

US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (TS-767) WASHINGTON, DC 20460	EPA REGISTRATION NO.	DATE OF ISSUANCE
	278-64	06 JUL 1993
NOTICE OF PESTICIDE: <input checked="" type="checkbox"/> REGISTRATION <input type="checkbox"/> REREGISTRATION (Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)	TERM OF ISSUANCE	
	NAME OF PESTICIDE PRODUCT	
Sanygen Industrial Clor		
NAME AND ADDRESS OF REGISTRANT (Include ZIP code)		
Miami Products & Chemical Co. P.O. Box 486 Dayton, OH 45401		
NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.		
On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.		
A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.		
Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.		
This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:		
1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.		
2. Add the phrase, "EPA Registration No. 278-64" to your label before you release the product for shipment.		
3. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.		
If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.		
<input type="checkbox"/> ATTACHMENT IS APPLICABLE		
SIGNATURE OF APPROVING OFFICIAL		DATE

A stamped copy of the label is enclosed for your records.

Sincerely,



Ruth G. Douglas
Product Manager (32)
Antimicrobial Program Branch
Registration Division (H-7504C)

Enclosures

Sanygen

INDUSTRIAL CLOR SODIUM HYPOCHLORITE

NET CONTENTS • 1 GALLON

Keep out of reach of children.

DANGER: See additional precautions on this label.

ACTIVE INGREDIENTS: Sodium Hypochlorite 12.5%
 INERT INGREDIENTS: 87.5%
 100.0%

FIRST AID: If on skin, wash with plenty of soap and water. If in eyes, flush with water for at least 15 minutes. Get medical attention. If swallowed, drink large quantities of water. Do NOT give vinegar or acids. Do NOT induce vomiting. Get prompt medical attention.

A constant free chlorine residual of 1.0 to 3.0 ppm must be maintained in a commercial swimming pool or spa at all times in order to insure that the water is clean, clear, and safe. Furthermore, occasional superchlorination may be needed to oxidize contaminants not eliminated by normal chlorine levels. SANYGEN INDUSTRIAL CLOR is effective for regular chlorination as well as for superchlorination when used as directed.

DIRECTIONS FOR USE: It is a violation of federal law to use this product in a manner inconsistent with its labeling.

FOR REGULAR CHLORINATION: SANYGEN INDUSTRIAL CLOR should be added with a mechanical feeder to maintain a free chlorine residual of at least 1.0 ppm throughout the pool or spa. An outdoor commercial pool will require approximately one gallon of SANYGEN INDUSTRIAL CLOR per 12,500 gallons per day in order to maintain a proper chlorine residual. Because sunlight lowers the chlorine residual, the amount of chlorine required will vary in relation to the intensity of the sunlight upon the pool water.

Chlorine demand is also affected by bather load and pool circulation and filtration characteristics. An outdoor pool will require approximately one gallon of SANYGEN INDUSTRIAL CLOR per 30,000 to 50,000 gallons of pool water per day in order to maintain a proper chlorine residual. Generally, sunlight has little effect on the chlorine residual of an indoor pool. The chlorine residual of an indoor pool is affected most by bather load and pool circulation and filtration characteristics.

FOR SUPERCHLORINATION: Occasionally, additional chlorine must be added to pool or spa water to keep it clear and odor free. SANYGEN INDUSTRIAL CLOR can be used for this "superchlorination." To rid pool water of the pasty green tint caused by algae growth, first adjust the pH of the water to between 7.4 and 7.6, then superchlorinate the pool with one gallon of SANYGEN INDUSTRIAL CLOR per 12,500 gallons of pool water. Caution: A clear green tint in pool water, particularly after the addition of fresh water, may be caused by dissolved iron. In this case, the pool should not be superchlorinated as doing so may create stains on the pool walls and floors.

To eliminate slimy green of black algae growths form the pool walls and floor, first adjust the pH of the water to between 7.4 and 7.6, then add one gallon of SANYGEN INDUSTRIAL CLOR per 6,000 gallons of pool water and brush the affected areas with a stiff brush. Do not allow bathers to use the pool again until the chlorine residual is between 1.0 and 3.0 ppm.

To eliminate the chlorine odor from pool water, first adjust the circulation so that all the water in the pool is moved through the filter at least once every eight hours and adjust the pH to between 7.4 and 7.6, then add one gallon of SANYGEN INDUSTRIAL CLOR per 12,500 gallons of pool water. Wait until the chlorine residual is between 1.0 to 3.0 ppm before allowing swimmers to use the pool again.

To eliminate the chlorine odor from spa water, first adjust the pH of the water to between 7.4 and 7.6, then add one liquid ounce of SANYGEN INDUSTRIAL CLOR per 100 gallons of spa water. Do not allow use of the spa again until the chlorine residual is between 1.0 and 3.0 ppm. If the odor persists, it may be necessary to lower the total dissolved solids level by draining the spa and refilling with fresh water. High chlorine levels can be lowered with SANYGEN CHLORINE NEUTRALIZER.

DOSAGE CHART

pool gallonage	regular chlorination (gal/day)		superchlorination 3/4
	indoor pool	outdoor pool	
25,000	1/2 - 1	2	2 - 4
50,000	1 - 2	4	4 - 8
75,000	1 1/2 - 1	6	6 - 12
100,000	2 - 4	8	8 - 16
150,000	3 - 6	12	12 - 24
200,000	4 - 8	16	16 - 32

CHLORINATED WATER DISPOSAL: At the end of the swimming pool season or when water is to be drained from pool, chlorine must be allowed to dissipate from treated pool water before discharge. Use a chlorine test set to determine same.

CALCULATING POOL GALLONAGE: To calculate pool gallonage multiply the total cubic feet of pool water times 7.5. To determine the total cubic feet of water in a square or rectangular pool, multiply the pool length by width by average depth; for a circular or elliptical pool, multiply the length by the width by the average depth by 0.8.

NOTE: This product degrades with age. Use a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

STORAGE AND DISPOSAL: Store this product in a cool dry area, away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer. Do not contaminate food or feed by storage, disposal or cleaning of equipment.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Corrosive, may cause severe skin irritation or chemical burns to broken skin. Causes eye damage. Do not get in eyes, on skin, or on clothing. Wear rubber gloves and goggles or face shield when handling this product. Wash after handling. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

NOTICE: APPLY THIS PRODUCT ONLY AS SPECIFIED ON THIS LABEL. Buyer assumes all risk of use of this product used contrary to directions.

DO NOT MIX WITH ACIDS or other chemicals.

ACCEPTED
with COMMENTS
In EPA Letter #
06 JUL 1993
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, and the Interim
Regulatory Act of 1974 (FIFRA),
278-64

MFG. BY MIAMI PRODUCTS & CHEMICAL COMPANY
DAYTON, OHIO 45403

EPA REG. NO. 278

EPA EST. NO. 278-OH-1



UN1791

FOR COMMERCIAL USE ONLY

Sanygen

INDUSTRIAL CLOR SODIUM HYPOCHLORITE

NET CONTENTS • 1 GALLON

Keep out of reach of children.

DANGER: See additional precautions on this label.

ACTIVE INGREDIENTS: Sodium Hypochlorite 12.5%
 INERT INGREDIENTS: 87.5%
 100.0%

FIRST AID: If on skin, wash with plenty of soap and water. If in eyes, flush with water for at least 15 minutes. Get medical attention. If swallowed, drink large quantities of water. Do NOT give vinegar or other acids. Do NOT induce vomiting. Get prompt medical attention.

A constant free chlorine residual of 1.0 to 3.0 ppm must be maintained in a commercial swimming pool or spa at all times in order to insure that the water is clean, clear, and safe. Furthermore, occasional superchlorination may be needed to oxidize contaminants not eliminated by normal chlorine levels. SANYGEN INDUSTRIAL CLOR is effective for regular chlorination as well as for superchlorination when used as directed.

DIRECTIONS FOR USE: It is a violation of federal law to use this product in a manner inconsistent with its labeling.

FOR REGULAR CHLORINATION: SANYGEN INDUSTRIAL CLOR should be added with a mechanical feeder to maintain a free chlorine residual of at least 1.0 ppm throughout the pool or spa. An outdoor commercial pool will require approximately one gallon of SANYGEN INDUSTRIAL CLOR per 12,500 gallons per day in order to maintain a proper chlorine residual. Because sunlight lowers the chlorine residual, the amount of chlorine required will vary in relation to the intensity of the sunlight upon the pool water.

Chlorine demand is also affected by bather load and pool circulation and filtration characteristics. An indoor pool will require approximately one gallon of SANYGEN INDUSTRIAL CLOR per 30,000 to 50,000 gallons of pool water per day in order to maintain a proper chlorine residual. Generally, sunlight has little effect on the chlorine residual of an indoor pool. The chlorine residual of an indoor pool is affected most by bather load and pool circulation and filtration characteristics.

FOR SUPERCHLORINATION: Occasionally, additional chlorine must be added to pool or spa water to keep it clear and odor free. SANYGEN INDUSTRIAL CLOR can be used for this "superchlorination." To rid pool water of the *pasty green tint* caused by algae growth, first adjust the pH of the water to between 7.4 and 7.6, then superchlorinate the pool with one gallon of SANYGEN INDUSTRIAL CLOR per 12,500 gallons of pool water. Caution: A *clear green tint* in pool water, particularly after the addition of fresh water, may be caused by dissolved iron. In this case, the pool should *not* be superchlorinated as doing so may create stains on the pool walls and floors.

To eliminate *slimy green* of black algae growths form the pool walls and floor, first adjust the pH of the water to between 7.4 and 7.6, then add one gallon of SANYGEN INDUSTRIAL CLOR per 6,000 gallons of pool water and brush the affected areas with a stiff brush. Do not allow bathers to use the pool again until the chlorine residual is between 1.0 and 3.0 ppm.

To eliminate the chlorine odor from pool water, first adjust the circulation so that all the water in the pool is moved through the filter at least once every eight hours and adjust the pH to between 7.4 and 7.6, then add one gallon of SANYGEN INDUSTRIAL CLOR per 12,500 gallons of pool water. Wait until the chlorine residual is between 1.0 to 3.0 ppm before allowing swimmers to use the pool again.

To eliminate the chlorine odor from spa water, first adjust the pH of the water to between 7.4 and 7.6, then add one liquid ounce of SANYGEN INDUSTRIAL CLOR per 100 gallons of spa water. Do not allow use of the spa again until the chlorine residual is between 1.0 and 3.0 ppm. If the odor persists, it may be necessary to lower the total dissolved solids level by draining the spa and refilling with fresh water. High chlorine levels can be lowered with SANYGEN CHLORINE NEUTRALIZER.

DOSAGE CHART

pool gallage	regular chlorination (gal/day)		superchlorination <i>4/7</i>
	door pool	outdoor pool	
25,000	1/2 - 1	2	2 - 4
50,000	1 - 2	4	4 - 8
75,000	1 1/2 - 1	6	6 - 12
100,000	2 - 4	8	8 - 16
150,000	3 - 6	12	12 - 24
200,000	4 - 8	16	16 - 32

CHLORINATED WATER DISPOSAL: At the end of the swimming pool season or when water is to be drained from pool, chlorine must be allowed to dissipate from treated pool water before discharge. Use a chlorine test set to determine same.

CALCULATING POOL GALLONAGE: To calculate pool gallonage multiply the total cubic feet of pool water times 7.5. To determine the total cubic feet of water in a square or rectangular pool, multiply the pool length by width by average depth; for a circular or elliptical pool, multiply the length by the width by the average depth by 0.8.

NOTE: This product degrades with age. Use a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

STORAGE AND DISPOSAL: Store this product in a cool dry area, away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer. Do not contaminate food or feed by storage, disposal or cleaning of equipment.

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

DANGER: Corrosive, may cause severe skin irritation or chemical burns to broken skin. Causes eye damage. Do not get in eyes, on skin, or on clothing. Wear rubber gloves and goggles or face shield when handling this product. Wash after handling. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

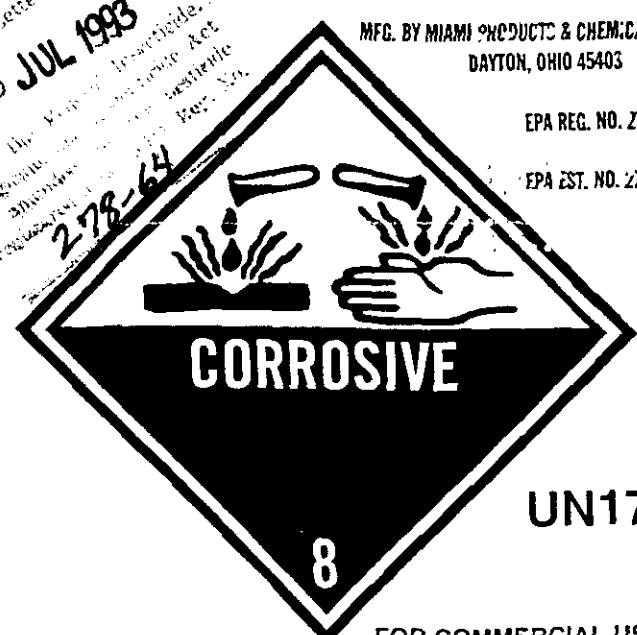
NOTICE: APPLY THIS PRODUCT ONLY AS SPECIFIED ON THIS LABEL. User assumes all risk of use of this product used contrary to directions.

DO NOT MIX WITH ACIDS or other chemicals.

ACCEPTED
with COMMENTS
in EPA Letter #
06 JUL 1993
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
278-64

MFG. BY MIAMI PRODUCTS & CHEMICAL COMPANY
DAYTON, OHIO 45403

EPA REG. NO. Z18
EPA EST. NO. 278-114-1



UN1791

FOR COMMERCIAL USE ONLY