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ZED ZED 60 FACTS

Zed Zed 60's active ingredient is Simazine.
Simazine is a member of the "Triazine" family.
Atrazine is also a member of the Triazine family.
Simazine is far less toxic than Atrazine.
Zed Zed 60 is an algaecide not a pool cleaner.
Zed Zed 60 is not recommended for use in indoor pools or heated pools.
Zed Zed 60 is mainly used to "winterize" outdoor pools.

USE:

Zed Zed 60 is a non foaming simazine based algaecide which gives excellent results in all pool types and in the presence of all commonly used pool sanitisers. Zed Zed 60 was the first simazine based pool algaecide registered for use in Australia over 30 years ago.

MAJOR ADVANTAGES:-

- Effective against black, green and mustard algae's by destroying their cell structures.
- Compatible with chlorine, bromine, salt water chlorination, ionic sterilization and biocide such as Baquacil.
- Non foaming
- Excellent residual properties for winterizing or long term algae control.

DISADVANTAGE:-

Being a long term algaecide Zed Zed 60 is a slow starter and will need a few days to a week to complete algae kill depending on water temperature. It should not be used where immediate results are required.

ENVIRONMENTAL IMPACT AND TOXICITY:

Because simazine was developed originally for weed control and is still used for that purpose, two misconceptions arise:-

(i) "Zed Zed 60 kills grass and plants around the pool". The concentration of simazine in the pool in dosing with Zed Zed 60 is some 100 times less than that required for weed control.

(ii) *"Zed Zed 60 is toxic to humans and animals".* Simazine is exempted from listing in the Standard for Uniform Scheduling of Drugs and Poisons due to its low toxicity. Its toxicity ratings for mammals (including humans) by oral or dermal rates are less than for common salt. It is practically non-toxic to birds and exhibits very minor toxicity to fish

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ENVIRONMENTAL IMPACT AND TOXICITY Cont…

(iii) *Human Toxicity:* The actual LD 50 is greater than 10,000 mg/Kg (rat) . Zed Zed 60 is 60 mg/Ltr active. This means that an adult weighing 80 Kg would need to swallow in excess of 13 Ltr of Zed Zed 60. A child weighing around 20 Kg would need to drink in excess of 3.5 Ltr of Zed Zed 60

Also children in general spend more time in swimming pools than adults. A typical 7-8 year old weighing 20 Kg would need to drink 200,000 ltr of pool water to ingest a near fatal dose of simazine.

Simazine remains popular with local councils for urban weed control for footpaths, roadsides etc.. where it will eventually wash off into creeks, dams and the ocean is seen as representing no hazard due to its low toxicity.

COMPETITIVE PRODUCTS:-

Quats: (Quaternary ammonium products such as benzylkonium chloride).
Quats give a reasonable spectrum of algae control with relatively low toxicity. They do however foam, destroy free chlorine in the water and are in turn unstable at high chlorine levels (10ppm+) which one would find, for instance around a salt water chlorinator cell. They also contain nitrogen which contributes to the food source in the pool.

Copper based products: (either straight salts such as copper sulphate or modified in complexed or chelated forms).

Copper products have a good spectrum of algae control and are unlikely to be a toxic problem if dosed correctly.
Copper products have several disadvantages:-

(1) With salt water chlorinators , copper complexes or chelates are broken down by the very concentrated chlorine in the cell chamber and thus revert to a form no better than copper sulphate. Even in a complexed form, copper will plate onto the salt chlorinator platinum cell reducing its effectiveness to produce chlorine, which means more acid washing of the cell which contributes to a shortening of cell life.

(2) In pools using the halogens chlorine or bromine only small amounts of copper (parts per billion) are needed to break down HOCl and HOBr to states that are no longer useful as sanitisers. This reaction also turns the copper to a form, which no longer kills algae. Thus the system becomes self defeating; with copper killing the halogen, the halogen killing the copper and nothing left to kill the algae. The final result of this must be increased halogen use.

(3) Copper can plate out on to the sides and bottom of a pool causing staining.

(4) Copper complexes usually contain amines and in breaking down with halogens, these amines result in nitrogeneous products adding to the food source in the pool.

- Information supplied by Poolkare Chemicals and Aquatune (SA).

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