General treatment for cooling towers with EOXIDE LQ 75

2 weeks manual dosing schedule:

Shock Dosage: of 1 ppm per day should be run for a period of 1-2 days depending upon the contamination level of water in circulation and the cooling tower system (contamination level is measured in the terms of Biofilms layers and inorganic pollutants in the water).

This dosage is usually given to clear the system run on by chlorine/other products initially and to accommodate chlorine dioxide in the system.

Standard dosage: between 0.1 – 0,3 ppm is given to maintain the overall well being of the system. This dosage will again depend on the water conditions.

2 week shock dosage: A medium shock dosage of 0.5 ppm is given every 2 weeks for keeping the system ok.

General formula followed:
volume of water to be treated (lts) * ppm dosage recommended / ppm strength of the solution = the volume of chemical required (lts)

Example 1:
Cooling tower capacity (incoming fresh water): 1500 liters daily.
Water in circulation: 7500 liters per hour.
Total water circulation, daily: 1500 + 7500 liters = 9000 liters daily.

Days	*Total water in circulation*	*ppm dosage*	*Total EOXIDE LQ 75 (liters)per day and 14 days.*
1	9000 liters	1	1,20
2	9000 liters	1	1,20
3	9000 liters	0.5	0.60
4	9000 liters	0.5	0.60
5	9000 liters	0.3	0.36
6	9000 liters	0.3	0.36
7	9000 liters	0.3	0.36
8	9000 liters	0.3	0.36
9	9000 liters	0.2	0.24
10	9000 liters	0.2	0.24
11	9000 liters	0.2	0.24
12	9000 liters	0.2	0.24
13	9000 liters	0.2	0.24
14	9000 liters	0.5	0.60
			Total 6,84 liters

eOx International b.v.
1e Lulofsdwarsstraat 117
2521 AZ Den Haag
The Netherlands

eOx International b.v.
P.O. Box 16480
2500 BL Den Haag
The Netherlands

■ Tel. +31(0)70-380 07 75
■ Fax +31(0)70-384 14 76
■ Internet:
www.eoxet.eu
www.aquasmarter.eu

info@eox-international.com

■K.v.K. voor Haaglanden
27290604
■BTW Nr.
NL 8161.10.700.B01

ING Bank ■ 66.81.27.082
IBAN ■ NL87 INGB 0668 1270 82
BIC-SWIFT ■ INGBNL2A

Example 2:
Cooling tower capacity (incoming fresh water): 20.000 liters daily.
Water in circulation: 144,000 liters daily.
Total water circulation, daily: 20.000 + 144,000 liters = 146,000 liters daily.

Days	***Total water in circulation***	***ppm dosage***	***Total EOXIDE LQ 75 (liters)per day and 14 days.***
1	146.000 liters	1	19,47
2	146.000 liters	1	19,47
3	146.000 liters	0.5	9,73
4	146.000 liters	0.5	9,73
5	146.000 liters	0.3	5,84
6	146.000 liters	0.3	5,84
7	146.000 liters	0.3	5,84
8	146.000 liters	0.3	5,84
9	146.000 liters	0.2	3,89
10	146.000 liters	0.2	3,89
11	146.000 liters	0.2	3,89
12	146.000 liters	0.2	3,89
13	146.000 liters	0.2	3,89
14	146.000 liters	0.5	9,73
			Total 110,94 liters

AUTOMATIC DOSING:
EOXIDE LQ 75 can be dosed with a standard automatic dosing pump available in the market. Before the automatic dosing pump is started we advise to apply the first two days a manual shock dose of 1 ppm in the cooling tower (see dosing schedule above).
When the dosing pump has started a continuous dosing of EOXIDE LQ it is enough to generate a level of 0,2 ppm residual of EOXIDE LQ present in the cooling tower.
Best is to maintain and control this level of chlorine dioxide by using a chlorine dioxide sensor or ORP/Redox system in combination with your dosing pump.

Corrosive:
EOXIDE LQ 75 is a pure chlorine dioxide **NOT** based on HCl, Sulphuric acid or Chlorine gas.
Pure chlorine dioxide starts to be corrosive dosed into the water when the pH of the water is less than 4.
Therefore we can confirm that EOXIDE LQ dosed into the water with a pH higher than 4 will not increase the corrosivity of the water.
NACE STATEMENT :(NACE : National Association of Corrosion Engineers: A international set of standards pertaining to corrosive materials and how they affect other material)
"ClO2 Solutions at typical treatment levels are not corrosive"
*** Corrosion rates les than 1.0 mpy (mils per year penetration) are generally considered insignificant & expected not to cause any problems.**