

SALT AND MINERALS

- ONLY USE APPROVED POOL GRADE SALT THAT IS SPECIFICALLY LABELLED FOR SWIMMING POOL AND SPA USE
- SALT MUST BE GREATER THAN 99% PURE
- USE ONLY MINERAL LAB BRANDED MINERALS AND MINERAL ADDITIVES
- DO NOT USE ROCK SALT, SALT WITH YELLOW PRUSSIAE OF SODA, SALT WITH ANTI-CAKING ADDITIVES OR IODIZED SALT.
- ADD SALT TO POOL WATER AS FAR AWAY FROM THE FILTRATION SYSTEM SUCTION POINTS AS POSSIBLE.
- CLOSE MAIN DRAIN VALVE WHERE APPLICABLE BEFORE ADDING SALT FOR AT LEAST 24 HOURS
- REMOVE ANY SUCTION DRIVEN POOL CLEANERS FROM THE WATER FOR AT LEAST 24 HOURS.

INITIAL SALT DOSING

Do not assume a pool full of water whether it is new or old has a zero salinity. A substantial amount of salt may be present in the water if the pool was previously treated with liquid chlorine or if the pool is filled by a water source high in salt. Depending on the geographical area, the tap water may have a high salinity level.

It is important to test the water first before calculating the initial salt dosage or you may over-salt the pool water.

Use the SALT ADDITION TABLE on the next page to quickly calculate the amount of salt required to bring your water to the ideal salinity level of 3000ppm. You will need to know your current salinity level in parts per million (ppm) and your pool water volume in Litres.

Please note: Although the salt chlorinator diagnostics will advise when to add salt and when not to add salt, you must always perform a salt test using a test kit or salinity meter to confirm the findings before making a salt addition.

INITIAL MINERAL DOSING

For swimming pools, pool / spa combinations and larger bodies of water use:

Mineral Lab Mineral Additive for Swimming Pools (6kg):

Add 1x 6kg bag for every 20kg of salt used.

eg. a 50,000 Litre pool with fresh water will theoretically require 150kg of salt, or 7.5 x 20kg bags to achieve 3000ppm. In this case we would recommend to initially round this down to 7 bags (140kg) in case of any error in the water volume estimate, and then add 7 bags of Mineral Lab Additive. Wait at least 24 hours for the salt and minerals to complete dissolve and disperse in the water before testing the salinity and add more only if required. Salinity level does not need to be precise, anywhere between 3000 – 3750ppm is generally acceptable.

For smaller bodies of water use:

1.7kg Combined Mineral Complex for Spas and Hot Tubs:

Add 1x 1.7kg bag for every 500 litres of water. No additional salt required.

SALT ADDITION TABLES

The Ideal Salinity Level for all Mineral Chlorinator models: 3000ppm

Use the table below to calculate the amount of salt required to bring your water to the ideal salinity level.

Current Salt Level (ppm)	Pool Volume (Litres)									
	10000 L	20000 L	30000 L	40000 L	50000 L	60000 L	70000 L	80000 L	90000 L	100000 L
0	30 kg	60 kg	90 kg	120 kg	150 kg	180 kg	210 kg	240 kg	270 kg	300 kg
250	28 kg	55 kg	83 kg	110 kg	138 kg	165 kg	193 kg	220 kg	248 kg	275 kg
500	25 kg	50 kg	75 kg	100 kg	125 kg	150 kg	175 kg	200 kg	225 kg	250 kg
750	23 kg	45 kg	68 kg	90 kg	113 kg	135 kg	158 kg	180 kg	203 kg	225 kg
1000	20 kg	40 kg	60 kg	80 kg	100 kg	120 kg	140 kg	160 kg	180 kg	200 kg
1250	18 kg	35 kg	53 kg	70 kg	88 kg	105 kg	123 kg	140 kg	158 kg	175 kg
1500	15 kg	30 kg	45 kg	60 kg	75 kg	90 kg	105 kg	120 kg	135 kg	150 kg
1750	13 kg	25 kg	38 kg	50 kg	63 kg	75 kg	88 kg	100 kg	113 kg	125 kg
2000	10 kg	20 kg	30 kg	40 kg	50 kg	60 kg	70 kg	80 kg	90 kg	100 kg
2250	8 kg	15 kg	23 kg	30 kg	38 kg	45 kg	53 kg	60 kg	68 kg	75 kg
2500	5 kg	10 kg	15 kg	20 kg	25 kg	30 kg	35 kg	40 kg	45 kg	50 kg
2750	3 kg	5 kg	8 kg	10 kg	13 kg	15 kg	18 kg	20 kg	23 kg	25 kg
3000	IDEAL	IDEAL	IDEAL	IDEAL	IDEAL	IDEAL	IDEAL	IDEAL	IDEAL	IDEAL
3250	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
3500	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
3750+	DILUTE	DILUTE	DILUTE	DILUTE	DILUTE	DILUTE	DILUTE	DILUTE	DILUTE	DILUTE

Operation at near to the ideal salinity will maximise cell life, self-cleaning efficiency and chlorine output.

In cases where water temperature is continually maintained above 35°C the ideal salinity is effectively reduced by approximately 500ppm.

The absolute maximum salinity level for reliable chlorine production is approximately 5000ppm @ 25°C, but continued operation at this level is not recommended and water should be diluted* as soon as possible to reduce the salinity.

Salinity levels higher than the absolute maximum, or water temperatures higher than 25°C at near to absolute maximum salinity may cause the chlorinator to stop producing chlorine in order to protect the power supply and electrode from damage.

MINERAL ADDITION

For every 20kg bag of salt added to the pool, add 1 x 7kg bag of Mineral Lab Additive for Swimming Pools. This will equate to approximately 100ppm Magnesium concentration. Do this every time you add salt to the pool to maintain the Magnesium level.

If there is already an unknown amount of magnesium in the water, then you must have the water tested for the magnesium level before adding minerals. Use the following formula to calculate the required amount of minerals to achieve 100ppm Magnesium.

840g Mineral Lab additive to 10,000 Litres will raise the Magnesium level by 10ppm.

Do not exceed 200ppm Magnesium.

* Pumping out a percentage of the water and refilling with fresh water is the fastest way to reduce salinity. In cases where water cannot be pumped out below the skimmer level this may need to be repeated several times if salinity needs to be reduced significantly.