Material Required for Fibreglass Swimming Pools

300GSM CHOPPED STRAND MAT

Pool Area	Sealer(Kg)	Fibreglass(Kg)	Resin(Kg)	Top Coat(Kg)	Catalyst(Kg)
30m	12	9	27	15	1
35m	14	105	31.5	17.5	1.25
40m	16	12	36	20	1.5
45m	18	13.5	40.5	22.5	1.6
50m	20	15	45	25	1.8
55m	22	16.5	49.5	27.5	2.0
60m	24	18	54	30	2.2
65m	26	19.5	58.5	32.5	2.4
70m	28	21	63	35	2.5
75m	30	22.5	67.5	37.5	2.7

450GSM CHOPPED STRAND MAT

Pool Area	Sealer(Kg)	Fibreglass(Kg)	Resin(Kg)	Top Coat(Kg)	Catalyst(Kg)
30m	12	13.5	40.5	15	1.35
35m	14	15.75	47.25	17.5	1.5
40m	16	18	54	20	1.8
45m	18	20.25	60.75	22.5	2.0
50m	20	22.5	67.5	25	2.20
55m	22	24.75	74.25	27.5	2.5
60m	24	27	81	30	2.7
65m	26	29.25	87.75	32.5	3.0
70m	28	31.5	94.5	35	3.2
75m	30	33.75	101.2	37.5	3.4

Notes:

1. Do not forget to add plus minus 10% wastage when calculating the area of the pool.
2. For 600gsm of chopped strand mat use the 300g table and multiply the glass and resin volume only by 2 , as there are 2 layers of 300gsm each.
3. Catalyst is calculated at 2% of resin weight. Minimum of 1% and a Maximum of 3% depending on the temperatures is added to the resin and top coats.
4. Resin required per square meter of fibreglass:
Fibreglass 300gsm = 750g of resin.
Fibreglass 450gsm = 1.13kg of resin.

% CATALYST ADDITION: Grams per Kg Used

Kilograms	1.00%	1.50%	2.00%
0.500	5g	7.5g	10g
1	10g	15g	20g
1.5	15g	22g	30g
2	20g	30g	40g
2.5	25g	37g	50g
3	30g	45g	60g
3.5	35g	52g	70g
4	40g	60g	80g
4.5	45g	67g	90g
5	50g	75g	100g
7.5	75g	112g	150g
10	100g	150g	200g

TEMPERATURE EFFECT ON GEL-TIME

Temperature °C	Catalyst %	Gel-Time/Working Time
15	2%	40 min
25	2%	20 min
35	2%	10min
15	1%	80 min
25	1%	40 min
35	1%	20 min

% CATALYST ADDITIONS IN GRAMS PER DIFFERENT MASS IN Kg's

KG's	1.0%	1.5%	2.0%	2.5%	3.0%
0.5	5g	7.5g	10g	12.5g	15g
1	10g	15g	20g	25g	30g
1.5	15g	22g	30g	37.5g	45g
2	20g	30g	40g	50g	60g
2.5	25g	37g	50g	62.5g	75g
3	30g	45g	60g	75g	90g
3.5	35g	52.5g	70g	87.5g	105g
4	40g	60g	80g	100g	120g
4.5	45g	67.5g	90g	112.5g	135g
5	50g	75g	100g	125g	150g
7.5	75g	112.5g	150g	187.5g	225g
10	100g	150g	200g	250g	300g
12.5	125g	187g	250g	312.5g	375g
15	150g	225g	300g	375g	450g
20	200g	300g	400g	500g	600g
25	250g	375g	500g	625g	750g

PLEASE NOTE:

Where catalyst weights become critical is that vol% is slightly more than weight %.
i.e. S.G. of catalyst = 1.16

Therefore:
vol% x 1.16 = mass %
1.5% x 1.16 = 1.74%
2.0% x 1.16 = 2.32%

Therefore for large weights such as 25kg rather use 1.5% than 2%

Quantities used per product:
Ideally Gelcoat is applied between 500 to 700 g/m²
Resin to Fibreglass ratio: 2.5kg of resin to 1 kg of fibreglass.

Temp. °C	MEKP Na 2 %	Gel Time In Minutes
15	2%	40
25	1%	40
25	2%	20
35	1%	10

This chart is intended as a basic guide and recommendations are made without warranty.

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