

## Training and Energy System Classification

Colour	Description	Physiological Measures			RPE	Training Set Labels		Notes
		Heart Rate	Heart Rate	Lactate		"Traditional"	Olbrecht	
Clear	Easy, Recovery, Relaxed Swimming	60-80BBM	< 120	< 2 mmol	8	Recovery	Regeneration	<ul style="list-style-type: none"> <li>Easy movements, no training effect.</li> <li>Typically completed at the start of warm-ups, for recovery during intense sets and in swim down.</li> <li>Important to maintain stroke technique and efficiency throughout.</li> </ul>
White	Low level aerobic. Easy to moderate effort with a focus on skill and technique.	50BBM	140-150	< 2.5 mmol	8-10	Aerobic Maintenance	Aerobic Capacity	<ul style="list-style-type: none"> <li>High volume, low/moderate intensity with short rest between repeats.</li> <li>Short rest between repeats.</li> <li>White and Pink will make a large proportion of weekly training volume especially in general preparation phases.</li> <li>Use Stroke Count work/targets to increase stroke efficiency.</li> <li>Add skill objectives within sets to challenge athletes.</li> <li>Even pacing and negative splitting should be frequently used.</li> <li>Use as an opportunity to re-enforce technique and to provide frequent feedback to athletes.</li> <li>Sets will lose effectiveness if stopped or interrupted frequently.</li> <li>Set design for 20-60 minutes total duration.</li> <li>Too much variation is less effective.</li> </ul>
Pink	Aerobic development, moderate effort.	40BBM	150-160	2-4 mmol	10-12	Aerobic Development	Capacity	<ul style="list-style-type: none"> <li>High volume, moderate/high intensity with short rest between repeats.</li> <li>Focus on maintaining skills, technique and efficiency (SC) throughout sets.</li> <li>Opportunity to use short rest sets within this category.</li> </ul>
Red	Aerobic development, "Threshold", high aerobic effort.	30BBM	160-170	Around 4 mmol	12-14	Threshold	Aerobic	<ul style="list-style-type: none"> <li>Moderate/high volume, high intensity, moderate/high rest.</li> <li>Best Average type sets.</li> <li>Most effective when completed on main stroke.</li> <li>Focus on maintaining technique and skills under fatigue.</li> <li>Bigger variation in sets for sprinters. Middle-Distance and Distance with more similarity.</li> </ul>
Blue	Moving above Threshold, very hard.	20BBM	170-190	4-8 mmol	14-18	Heart Rate /Vo2 Max	Capacity	<ul style="list-style-type: none"> <li>Moderate volume, high intensity, short/moderate rest.</li> <li>Important for mid-distance/distance swimmers to prepare for 400m/800m/1500m (200m) events.</li> <li>Aim to complete repeats with racing stroke rates/counts and with world class skills and technique.</li> </ul>
Purple	"Best Average" effort, very very hard.	10BBM	190+ bpm	8+ mmol	16-20	Heart Rate /Vo2 Max	Anaerobic	<ul style="list-style-type: none"> <li>Moderate/low volume, very high/maximal intensity, long/very long rest.</li> <li>Sets can at times, be completed in racing suits.</li> <li>Use of race pace charts/speed tables/race profiles adds to specificity of sets.</li> </ul>
Orange	Fast, cannot swim faster within the demands of the set.	n/a	n/a	6-9 mmol	16-20	Race Pace (200m+)	Aerobic Power	<ul style="list-style-type: none"> <li>Short intervals [10-35m/4-20 secs] with very long periods of rest.</li> <li>Everything must be completed at maximum speed with no compromise on technique or skill.</li> <li>Monitoring of Stroke Rates during these types of set would be advantageous.</li> <li>Important for athletes to be 'fresh' for this type of work to be most effective.</li> <li>Starts, Turn, Finish and Resisted/Assisted work all very useful ways of training in this zone.</li> </ul>
Green	Maximum effort, All-Out, "Best Effort"	n/a	n/a	Maximum (12+ mmol if achievable)	18-20	Lactate Tolerance/Race Pace (50-200m)	Aerobic Power	
Gold	Top end speed, explosive speed and power, HVO's.	n/a	n/a	n/a	n/a	Speed/Power	Speed	