



INTERNATIONAL RESIDUE LIMITS

The National Horseracing Authority wishes to advise that the International Federation of Horseracing Authorities (IFHA) has approved International Screening Limits (ISLs) to be applied in the control of therapeutic substances and also Residue Limits to control certain contaminants and environmental substances. These ISLs and International Residue Limits form part of the International Agreement on Breeding, Racing and Wagering. The NHA, as the South African member of the IFHA, has agreed to adopt selected ISLs. In accordance with this, the NHA is currently applying these in its screening program while employing the IFHA's definition which is as follows:

The ISL is the urine or plasma concentration adopted for the screening of a specified therapeutic prohibited substance; it is derived from administration studies followed by a risk analysis consisting of two components: a risk assessment (evaluation of the effect of the substance and factors related to its control) and a risk management (decision step for harmonisation). ISLs and International Residue Limits are harmonised detection limits agreed following input by international consensus and are conveyed by instruction from racing authorities to their laboratories. These limits are simply the detection limits to be used by the laboratories when screening for certain therapeutic substances as instructed by the authorities; they are not international thresholds. When the screening procedure indicates the limit, in either urine or plasma, has been exceeded, all that is required is qualitative confirmatory analysis (usually by mass spectrometry) to confirm the presence or absence of the prohibited substance. Quantification is not required.

Substance	International Residue Limits	
	Urine	Plasma
Caffeine	50 ng/ml urine	20 ng/ml plasma
Dimethyl sulfoxide (DMSO)	15 µg/ml urine	1000 ng/ml plasma
Theophylline	250 ng/ml urine	
Methylsulfonylmethane (MSM)	1200 µg/ml urine	
Morphine*	30 ng/ml urine	
Bufotenine	10 µg/ml urine	

DMT (N,N-Dimethoxytyramine)	10 µg/ml urine	
Hordenine	80 µg/ml urine	
Theobromine	2000 ng/ml urine	300 ng/ml plasma

*Total Morphine, in both free and conjugated forms.

ng/ml = nanograms per millilitre

µg/ml = micrograms per millilitre