



## Dipslides

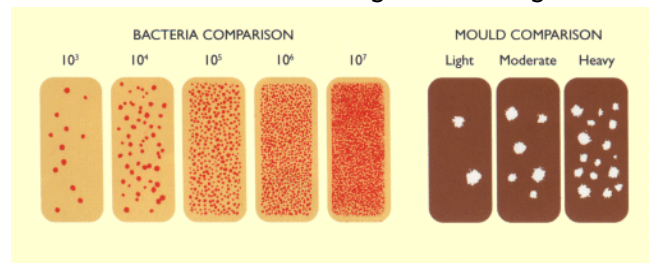
### Sampling & Testing Notes for Metalworking/Cutting Fluids

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Uncontrolled development of bacteria in metalworking fluids presents a serious risk due to the spray & mist generated by various machining processes. This may be inhaled in the form of tiny droplets exposing the respiratory tract to direct infection. Another school of thought may now also attribute this to some skin conditions. Micro Slide Dip slides allow a simple screening of fluids to establish the level of bacteria and decide appropriate action or monitor the performance/dose level of any Biocide treatment regime.

We recommend using our TTC/Malt product, this will give a clear bacteria count on the clear agar and a fungal count on the brown agar, our TTC/Rose slide will offer the same test but the pink/red agar for fungal counts is developed for high protein applications and may be better suited to synthetic fluids.

Bacteria counts should not exceed  $10^3$  and above this level requires action in the form of a Biocide or cleaning regime review, fluid manufacturers will offer advice on this together with suitable Biocides. Prior to any testing you must undertake a risk assessment; the UK Health & Safety Executive website has a resource & forms in Metalworking Fluids Section



Incubation is important to promote accurate culture growth, both slide types are best incubated at  $30^{\circ}\text{C}$ , it should be noted that bacteria counts will need at least 48 Hrs & fungal counts up to 5 days. Incubation at  $35^{\circ}\text{C}$  will promote a more rapid bacteria count but may be detrimental to fungal counts as they tend to prefer cooler, damp conditions. If facilities allow  $32 - 33^{\circ}\text{C}$  is a happy medium although it is worth continuing incubation for up to 72 hrs for bacteria, especially if counts initially appear low.

1 - Prior to use please keep the slides in a cool place (not a fridge) at around  $10 - 15^{\circ}\text{C}$ .

Dipslides have a typical shelf life



of 8 - 9 months. Once the dipslide is opened care must be taken not to touch the media or expose the media to the atmosphere in order to prevent false contamination.

2 - Ideally the sample should be taken in a clean container rinsed with the water to be tested. You can also sample directly from the



tower sump ensuring you do not touch any of the surfaces. Submerge the dipslide to the top of the culture media for around 2 seconds and then shake gently to remove excess fluid replacing in the tube.

3 - Place the slide into the Incubator, for the required temperature and period. Incubation is vital for accurate results, windowsill or



radiators will not allow accurate interpretation as if too warm bacteria will be destroyed and if too cold bacteria may fail to develop fully; both scenarios will lead to false results.