

## Dry Hopping - Be Inspired!

Where dry hopping is used to add hop aroma to a beer the brewer faces many challenges. Losses though adsorption, inconsistent aroma and lengthy vessel occupation can all be overcome. Totally Natural Solutions Ltd have developed a way to add dry hop aroma efficiently, whilst maintaining beer quality.

A range of aroma molecules within the essential oil of hops are the key to giving beer its unique hop aroma. Hop oil components vary, adding a further level of complexity for brewers wanting to add aroma to their beer using dry hopping techniques.

In using HopBurst,® part of the HopInspiration® range, brewers can adjust hop aromas independently and with ease. Light stable, nitrate and pesticide free, with no effect on foam stability or haze. Please contact us for a sample.

## What is HopBurst®?

- A concentrated varietal hop oil extract
- Able to add hop aroma and flavour independently
- Added post fermentation to the beer
- Dose range 5 40ml / hl. Typical dose 15ml / hl
- Easy to use, no spent hop to remove, flexible, reproducible



TRADITIONAL DRY HOPPING vs TNS HOPBURST®		
	Dry hopping	HopBurst <sup>®</sup>
All natural	Yes	Yes
Dose rate	100 – 500g / hl	5 – 40ml / hl
Cost in use	£1 – £12 / hl	£1 – £5 / hl
Utilisation	20 – 35%	Up to 100%
Easy to use	Easy to add, not so easy to remove	Yes - add to bright beer barrel, cask, firkin or keg
Reproducibility	Oil content and utilisation will vary	Yes - HopBurst® is a standardised product
Beer loss	Typically 10% to 20% wort absorption through hops	None
Contact time	3 – 14 Days	2 – 24 Hours
Microbial Stability	Chance of contamination	Antimicrobial
Blockage of dip tube	Potentially	No
Vessel cleaning	Time consuming to remove spent hops	No hop matter to be removed