

ASBC Approved Methods Hops – 12

Calculation

$$\text{HSI} = \frac{A_{275}}{A_{325}}$$

Hop Storage Index

Absorbance (A) at 275 nm

Absorbance (A) at 325 nm

Result

HSI

(a) Routine evaluation:

Absorbance (A) at 275 nm = 0.188.

Absorbance (A) at 325 nm = 0.696.

$$\begin{aligned}\text{HSI} &= \frac{0.188}{0.696} \\ &= 0.27\end{aligned}$$

(b) Application of HSI to "fresh" and "aged" hops (Ref. 2):

"Stable" hops: fresh = 0.22; aged = 0.32.

"Unstable" hops: fresh = 0.26; aged = 0.79.

In collaborative tests (Ref. 1), hops with HSI grand means varying from 0.283 to 0.603 showed a within-laboratory error (S_r) varying from 0.0050 to 0.0121 and a combined-laboratory error (S_c) varying from 0.0116 to 0.0238.