

A solid teal vertical bar.

# GLUCAN INSTABILITY

A large teal curved bar in the top right corner.

Dubourdieu et al. (1981) developed two precipitation tests for glucans. The first procedure given is for the presence of glucans in concentrations greater than 15 mg/L, the second for levels as low as 3 mg/L. Even at low concentrations, glucans can cause filtration problems. A positive test for the presence of glucans should be followed by a laboratory fining trial using glucanases and retesting (see Chapter 16).

I. Procedure for Glucans > 15 mg/L:

1. Add 5 mL of 96% ethanol (vol/vol) acidulated with 1% HCl to a tube containing 10 mL of wine.

**Interpretation:** the formation of a white filament is indicative of the presence of glucans at levels greater than 15 mg/L. Because much lower levels can cause problems, an additional test that will detect glucans at concentration above 3 mg/L may be warranted.

II. Procedure for Glucans > 3 mg/L:

1. 5 mL of wine is mixed with 5 mL of 96% ethanol (vol/vol) acidulated with 1% HCl.
2. After 30 minutes at room temperature the mixture is centrifuged at 3,000 g for 20 min.
3. The supernatant is carefully removed and the precipitate redissolved in 1 mL water. The precipitate is then mixed with 0.5 mL acidulated ethanol.

**Interpretation:** The formation of filaments is indicative of glucans.

Zoecklein, B.W., Fugelsang, K.C., Gump, B.H., Nury, F.S. *Wine Analysis and Production*. New York: Chapman & Hall, 1995.

*The indications supplied are based on our current knowledge and experience, but do not relieve the user from adopting the necessary safety precautions or from the responsibility of using the product(s) properly.*

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