



WINE DIAMONDS

What are wine diamonds?

Wine diamonds are crystals of potassium bitartrate. They are a naturally occurring byproduct of fermentation. They can have the appearance of loose sugar crystals or can form larger clumps of crystals.

How are wine diamonds formed?

As a wine ferments the alcohol level increases. The higher the alcohol level the less likely a wine is able to keep tartaric acid in solution. When a wine is chilled, the ability to keep tartaric acid in solution further decreases. These two factors combined can lead to crystals forming in the wine as the tartaric acid falls out of solution. Once crystals begin to form there is a snowball effect where the presence of crystals facilitate the formation of more tartrate crystals.

How will wine diamonds affect my wine?

Potassium bitartrate crystals have no taste or aroma. They do not affect the profile of the wine or how it is perceived. The drop out of tartaric acid also has a negligible effect on the overall acid level of the wine. Most people carefully decant wines with diamonds before consuming so that the wine retains the intended aesthetic value.

I heard that wine diamonds indicate quality juice. Is this true?

Grape juice that contains a high level of tartaric acid generally comes from ripe grapes that are well balanced in their analytical specifications. The taste and aroma of the finished product is always a better indicator of the quality of the juice.

Why do some wines have wine diamonds and not others?

Whether your wine will produce wine diamonds is largely based on the initial tartaric acid concentration of the grapes. White grapes from cooler climates tend to have more tartaric acid although warm climate red grapes could conceivably drop out wine diamonds when fermented. This is more likely in red wines that have a very high alcohol percentage.

How do I avoid wine diamonds?

The simplest way to avoid wine diamonds is to not store wines in the fridge. The cold temperatures in the refrigerator will accelerate wine diamond formation. Therefore, only chill bottles in the fridge prior to drinking.

Some winemakers have the capability to cold stabilize their wines. Before bottling, the bulk wine is placed in a cooler for two weeks. This is normally enough time to remove any wine diamonds that might have formed in the bottle.

Why don't commercial wines I purchase have this problem?

Commercial wineries often cold stabilize their wines prior to bottling. This is especially true for white wines. If they did not cold stabilize their wine, you would see wine diamonds in their products as well.

For further information on craft winemaking, visit www.rjscraftwinemaking.com.