

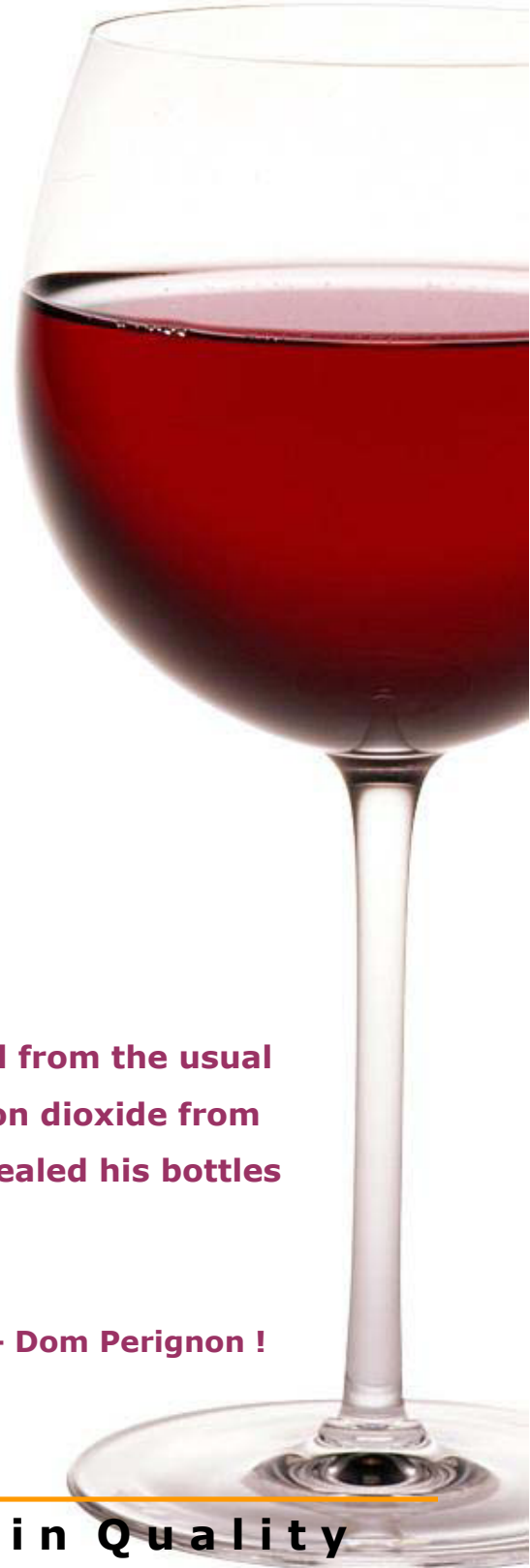
Food & Beverage Analysis >>

Alcoholic Beverages

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|-----------------|-----------------|
| Whisky, | IS: 4449 - 1988 |
| Rum, | IS: 3811 - 1988 |
| Brandy, | IS: 4100 - 1988 |
| Gin, | IS: 4100 - 1988 |
| Vodka, | IS: 5286 - 1988 |
| Beer, | IS: 3865 - 1993 |
| Toddy, | IS: 8538 - 1988 |
| Country Spirit, | IS: 5287 - 1989 |

In the 1600s, a blind Benedictine monk departed from the usual practice of sealing wine bottles with cloth. Carbon dioxide from fermentation can escape through cloth. But he sealed his bottles with cork. Result - sparkling wine...

Oh, let's not forget to tell you the monk's name - Dom Perignon !



Quality Control Testing can provide clients with valuable information at every step of the wine-making process.



Even before the grapes are harvested, CLL's analytical services division can help you improve vine quality through an analysis of soil chemistry. After harvest, quality control tests can tell you about:

- ? Phenols...impart flavor, color and taste
- ? Lactic acid...signals the level of malo-lactic fermentation
- ? Glycerol...indicates rot and mold in grapes
- ? Arginine...indicates the vine's growth conditions

During crushing and de-stemming the grapes, malic acid, tartaric acid, pH, total acid, density, extract, reducing sugar, brix and gluconic acid, provide important information on treatment required to achieve desired quality.

Under fermentation constant monitoring of malic acid, volatile acid, pH, reducing sugar, total acid, density, CO₂, acetic acid, glucose/fructose and ethanol is required. Bio-burden studies for monitoring brewing & bottling operations are also required for HACCP / ISO certified manufacturing plants.



The finished wine, has to be certified for the following parameters:

- ✿ Ethanol, brightness and hue, total acid, volatile acid, malic acid, pH, lactic acid, glucose, fructose, reducing sugars, tartaric acid, density, glyconic acid, glycerol, methanol, sorbic acid, ethyl acetate, citric acid, CO₂.
- ✿ Heavy Metals Analysis (Mandatory under PFA GSR No. 685(E) dated 26/08/2003)
- ✿ Pesticide Residues (Mandatory under PFA GSR No. 685(E) dated 26/08/2003)

Other substances and characteristics that can be measured include:

- | | |
|--|----------------------------|
| ✿ Aldehydes (as Acetaldehyde) | ✿ Shelf Life Studies |
| ✿ FAME profile on Gas Chromatograph | ✿ Unfermentable Sugars |
| ✿ Sterility of Bottles and Corks | ✿ Pesticide Residues |
| ✿ Microbiological Contamination in Final Product | ✿ Toxic Metal Contaminants |
| ✿ Higher Alcohols | |

CLL's NABL (ISO 17025) accredited labs can provide your complete Quality Certification as per CODEX (for exports), BIS, and PFA specifications. CLL is approved by Bureau of Indian Standards, and serves quality assurance requirements of several alcoholic beverage manufacturers - Shaw Wallace, McDowells, Som Distilleries, Customs and Excise Department (GoI), etc.

For any further queries, contact info@choksilab.com, or write in to:

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