

# HOPSTEINER – NEWSLETTER

## JANUARY 2011

TECHNICAL SUPPORT



  
**Hopsteiner**®

COMMITTED TO THE BREWER.

## Utilization of Isomerized and Reduced Isomerized Extracts

Downstream products, such as regular iso extract, rhohydro-iso-, tetrahydro-iso- and hexahydro-iso extracts, are usually dosed prior to filtration. However in practice some brewers are still adding these extracts after filtration, when there is a distinct risk of precipitation in beer and therefore also of inducing gushing.

In some cases, when brewing light stable beers, the reduced iso extracts are added to the kettle. This is mainly done to avoid infections in wort and green beer, as no other hop products can be added.

The yields shown in the following table compare kettle addition of these products with dosage prior to filtration. There are of course variations from brewery to brewery depending on specific dosing conditions and individual wort or beer characteristics. Therefore only a range is indicated.

Utilization in %* for		
	Kettle addition	addition prior to filtration
Iso extract	45 - 55	80 - 95
Rhohydro	45 - 55	70 - 85
Tetrahydro	25 - 40	60 - 80
Hexahydro	25 - 40	60 - 80

\*Calculation based on HPLC in beer and hop product.

There is also an influence of the polarity of each product on their solubility and utilization in wort and beer. Tetra- and hexahydro are less soluble owing to a greater degree of hydrogenation. On the other hand they contribute to better foam enhancement in beer because of this reduced solubility.

If it is necessary to dose reduced iso extracts into the kettle, usually rhohydro-iso is used owing to its better solubility.

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