

Batch Size	Losses	Boil Time	Mash Efficiency	Mash Volume	Sparge Volume
30 L	3 L	90 mins	64%	31.78 L	18.23 L
OG (Brix)	FG (Brix)	IBU	Colour (EBC)	ABV	
18.10	2.84	20.5	39.6	8.33%	

Mash and Sparge volumes calculated using the "JK Braukessel" profile.

Fermentables	Amount	Usage	PPG	EBC
Vienna Malt Supplier: Weyermann	5.00 kg (41%)	Mash	37.8	5.9
Munich I Supplier: Weyermann	5.00 kg (41%)	Mash	37.8	14.0
Carared Supplier: Weyermann	2.00 kg (16%)	Mash	35.8	47.3
Carafa II Supplier: Weyermann	0.30 kg (2%)	Mash	35.8	818.2

Mash Steps	Temp	Time
Einmaischen	55 °C	1 min
Eiweißrast - Protease	53 °C	15 min
Maltoserast - β-Amylase	63 °C	60 min
Verzuckerungsrast - α-Amylase	72 °C	30 min
Abmaischen	78 °C	1 min

Hops	Amount	Type	Usage	Time	AA
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Hops	Amount	Type	Usage	Time	AA
Spalter Select (IBU: 12.2)	30.00 g (48%)	Pellet	Boil	90 min	5.8
Magnum (IBU: 2.0)	3.00 g (5%)	Pellet	Boil	20 min	13.9
Cascade (IBU: 6.3)	30.00 g (48%)	Pellet	Boil	10 min	5.7

Yeast	Amount	Attenuation
Lallemand Nottingham Yeast	22 g	75 %

Fermentation Steps	Temp	Time
Fermentation	20 °C	14 days

Notes