

Cascadian Dark Ale

- Gravity **16 BLG**
- ABV ---
- IBU **58**
- SRM **40**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **90 min**
- Temp **67 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **15 min** at **67C**
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	4.6 kg (83.6%)	80 %	4
Grain	Crystal 400	0.4 kg (7.3%)	71 %	400
Grain	Chocolate	0.3 kg (5.5%)	73 %	900
Grain	Black	0.2 kg (3.6%)	73 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	25 g	60 min	13.7 %
Boil	Dr Rudi	25 g	20 min	11.8 %
Boil	Cascade	15 g	15 min	7.7 %
Boil	Cascade	15 g	5 min	7.7 %
Boil	Cascade	20 g	1 min	7.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale