

117 YDB

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **28**
- SRM **8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **25.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.5 liter(s)**
- Total mash volume **16.7 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **12.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **77C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) Bel	2 kg (41.9%)	80 %	6
Grain	Briess - Munich Malt 10L	1.5 kg (31.4%)	77 %	20
Grain	Briess - Aromatic Malt	0.5 kg (10.5%)	77 %	39
Grain	belgian medium crystal	0.17 kg (3.6%)	75 %	80
Sugar	pilnocillo	0.6 kg (12.6%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northern Brewer	28 g	90 min	6.5 %
Boil	saaz	28 g	15 min	3 %
Aroma (end of boil)	Saaz (Czech Republic)	14 g	5 min	3 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP550 - Belgian Ale Yeast	Ale	Liquid	10 ml	White Labs