Birch Summer Ale

- Gravity **11.2 BLG**
- ABV **---**
- IBU **25**
- SRM **8.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

Steps

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

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **18.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.8 kg *(68.3%)*	80 %	4
Grain	Strzegom Wiedeński	1.2 kg *(29.3%)*	79 %	10
Grain	Strzegom Karmel 300	0.1 kg *(2.4%)*	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	12 g	60 min	13.5 %
Aroma (end of boil)	Cascade	10 g	10 min	6.9 %
Aroma (end of boil)	Cascade	10 g	5 min	6.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
fermentis US-05	Ale	Dry	11 g	---