

#63 Milkshake Citra

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **38**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **17 %/h**
- Boil size **29.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **63 C**, Time **50 min**
- Temp **73 C**, Time **20 min**
- Temp **76 C**, Time **30 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **20 min** at **73C**
- Keep mash **30 min** at **76C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (84.9%)	80 %	5
Grain	Strzegom Wiedeński	0.2 kg (3.8%)	79 %	10
Grain	Pszeniczny	0.5 kg (9.4%)	85 %	4
Grain	Carahell	0.1 kg (1.9%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	60 min	12 %
Boil	Citra	10 g	30 min	12 %
Aroma (end of boil)	Citra	5 g	15 min	12 %
Aroma (end of boil)	Citra	10 g	5 min	12 %
Aroma (end of boil)	Citra	5 g	0 min	12 %
Dry Hop	Citra	30 g	3 day(s)	12 %

Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	500 g	Boil	15 min