Jasne

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **53**
- SRM **3.6**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg *(100%)*	85 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	16.3 %
Boil	Columbus/Tomahawk/Zeus	20 g	25 min	16.3 %
Boil	Columbus/Tomahawk/Zeus	10 g	5 min	16.1 %
Dry Hop	Citra	60 g	4 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Belgian Fruit Spicy Ale Yeast	Ale	Dry	10 g	Gozdawa