

EXPORT

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **23**
- SRM **10.3**

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 **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.7 liter(s)**
- Total mash volume **24.1 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.7 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (56.1%)	80 %	5
Grain	Słód karmelowy Carmel - Malteurop	0.25 kg (4.7%)	75 %	115
Grain	Strzegom Czekoladowy 400	0.1 kg (1.9%)	68 %	400
Grain	Strzegom Monachijski typ I	2 kg (37.4%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galena	15 g	60 min	12 %
Aroma (end of boil)	Galena	15 g	5 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis