159 Bitter

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **32**
- SRM **9**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **24.2 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **28.9 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **20.2 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.7 kg *(77.1%)*	80 %	5
Grain	Fawcett - Brown	0.5 kg *(10.4%)*	72 %	180
Grain	Strzegom Pszeniczny	0.3 kg *(6.3%)*	81 %	6
Grain	Bestmalz Carmel Pils	0.3 kg *(6.3%)*	75 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	50 min	12.5 %
Boil	Hallertau Tradition	10 g	20 min	5.6 %
Boil	Sybilla	10 g	20 min	7 %
Boil	Hallertau Tradition	10 g	1 min	5.6 %
Boil	Sybilla	10 g	1 min	7 %

Yeasts

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