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- Gravity **20.9 BLG**
- ABV **9.3 %**
- IBU **52**
- SRM **14.8**
- Style **American Barleywine**

Batch size

- Expected quantity of finished beer **9.5 liter(s)**
- Trub loss **3 %**
- Size with trub loss **9.8 liter(s)**
- Boil time **120 min**
- Evaporation rate **20 %/h**
- Boil size **14 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **9.7 liter(s)**
- Total mash volume **13.5 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **9.7 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **75C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	0.435 kg (11.3%)	83 %	6
Grain	Strzegom Karmel 150	0.2 kg (5.2%)	75 %	150
Grain	Munich Malt	1.2 kg (31%)	80 %	18
Grain	Weyermann Caramunich 3	0.13 kg (3.4%)	76 %	150
Grain	Carahell	0.1 kg (2.6%)	77 %	26
Grain	Viking Pale Ale malt	1.8 kg (46.6%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
~120 g chmielu dzikiego				
Boil	East Kent Goldings	18 g	30 min	4.6 %
Boil	East Kent Goldings	12 g	30 min	6.3 %
Boil	Fuggles	30 g	10 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	10.5 g	Fermentis
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