HERFSTBOK

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **35**
- SRM **20**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **6 %**
- Size with trub loss **19.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.2 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski typ II	3 kg *(49.2%)*	80 %	22
Grain	Pilzneński	2 kg *(32.8%)*	81 %	4
Grain	Abbey	0.5 kg *(8.2%)*	75 %	45
Grain	Melanoidynowy	0.25 kg *(4.1%)*	81 %	53
Grain	Caraaroma	0.25 kg *(4.1%)*	78 %	400
Grain	Carafa Special II	0.1 kg *(1.6%)*	70 %	812

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	55 g	60 min	4.3 %
Boil	Hallertau Tradition	45 g	20 min	4.3 %

Yeasts

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