

Hajstra (FES)

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **49**
- SRM **35.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	2.5 kg (67.6%)	83 %	6
Grain	Strzegom Monachijski typ II	0.4 kg (10.8%)	79 %	22
Grain	Jęczmień palony	0.4 kg (10.8%)	55 %	985
Grain	Płatki owsiane	0.2 kg (5.4%)	60 %	3
Sugar	Brown Sugar, Dark	0.2 kg (5.4%)	100 %	99

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	East Kent Goldings	40 g	60 min	5.1 %
Aroma (end of boil)	East Kent Goldings	25 g	20 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M36 Liberty Bell Ale	Ale	Dry	11 g	Mangrove Jack's
Danstar - Nottingham	Ale	Dry	11 g	Danstar

Extras

Type	Name	Amount	Use for	Time
Other	Pożywka	2 g	Boil	10 min
Fining	Whirlfloc T	2 g	Boil	10 min