

Żyto na przelew

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **22**
- SRM **6.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **2 %**
- Size with trub loss **24.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.1 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **17.6 liter(s)**
- Total mash volume **23.1 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **60 min**
- Temp **73 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **17.6 liter(s)** of strike water to **57C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **73C**
- Keep mash **5 min** at **78C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **30.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (63.6%)	80 %	5
Grain	Żytni	1.5 kg (27.3%)	85 %	8
Grain	Acid Malt	0.2 kg (3.6%)	58.7 %	6
Grain	Caraaroma	0.1 kg (1.8%)	78 %	400
Grain	Płatki żytnie	0.2 kg (3.6%)	60 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Citra	20 g	60 min	12 %
Boil	Iunga	15 g	30 min	12.4 %
Whirlpool	Citra	20 g	10 min	12 %
Whirlpool	Galaxy	20 g	10 min	15 %
Dry Hop	Citra	120 g	3 day(s)	12 %
Dry Hop	Galaxy	80 g	3 day(s)	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Verdant IPA	Ale	Slant	150 ml	Lallemand

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	5 g	Mash	70 min
Flavor	skórka pomarańczy	25 g	Boil	10 min