

NE IPA DDH

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **18**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.1 liter(s)**

Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (66.7%)	81 %	6
Grain	Płatki pszeniczne	1 kg (16.7%)	85 %	3
Grain	Płatki owsiane	1 kg (16.7%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus	10 g	5 min	15.5 %
Boil	Chinook	10 g	5 min	11.7 %
Aroma (end of boil)	Columbus	20 g	1 min	15.5 %
Aroma (end of boil)	Chinook	20 g	1 min	11.7 %
Whirlpool	Columbus	20 g	15 min	15.5 %
Whirlpool	Chinook	20 g	15 min	11.7 %
Dry Hop	Columbus	25 g	5 day(s)	15.5 %
Dry Hop	Chinook	25 g	5 day(s)	11.7 %
Dry Hop	Columbus	25 g	3 day(s)	15.5 %
Dry Hop	Chinook	25 g	3 day(s)	11.7 %

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
Vermont Ale	Ale	Culture	800 g	Yeast Bay

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	5 g	Boil	60 min
Water Agent	Chlorek wapnia	10 g	Boil	60 min

Notes

- Woda "Oaza" z Biedry:
HCO - 134
SO - 69
Cl - 18
Ca - 60
Mg - 13
Na - 5
K - 0,75
Stosunek Cl/SO = 178/162mg/l
Dec 6, 2018, 10:37 PM