

Hazy Hop Mix Pale Ale

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **36**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **7 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **68 C**, Time **45 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **45 min** at **68C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Malting - Pilzneński 6-rzędowy	5 kg (76.9%)	80 %	5
Grain	Pszeniczny	0.5 kg (7.7%)	85 %	4
Grain	Castlemalting - Cara Clair	0.5 kg (7.7%)	78 %	4
Grain	Płatki owsiane	0.5 kg (7.7%)	60 %	3
wcześniej skleikowane				

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Summit	20 g	15 min	17 %
Aroma (end of boil)	Dr Rudi	25 g	15 min	11.8 %
Aroma (end of boil)	Motueka	20 g	15 min	7 %
Whirlpool	Hallertau Blanc	50 g	0 min	11 %
Whirlpool	Lemon drop	40 g	0 min	4.6 %
Dry Hop	Hallertau Blanc	50 g	5 day(s)	11 %
Dry Hop	Centennial	50 g	5 day(s)	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M66 Hophead Ale	Ale	Dry	10.5 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	3 g	Mash	0 min