

Cervus 13PA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **31**
- SRM **7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **35.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **15 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **22.3 liter(s)** of **76C** water or to achieve **35.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (61.5%)	80 %	4
Grain	Strzegom Pszeniczny	1.5 kg (23.1%)	81 %	4
Grain	Karmelowy Czerwony	1 kg (15.4%)	75 %	60

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	10 g	60 min	13.1 %
Boil	Equinox	15 g	45 min	13.1 %
Mash	Equinox	20 g	0 min	13.1 %
Boil	Equinox	10 g	15 min	13.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us05	Ale	Dry	11.5 g	---