

NSH APA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **21**
- SRM **7.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **32 liter(s)**
- Trub loss **3 %**
- Size with trub loss **36.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **43.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **37.5 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **30 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **20.8 liter(s)** of **76C** water or to achieve **43.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (66.7%)	85 %	7
Grain	Viking Wheat Malt	2 kg (26.7%)	83 %	5
Grain	Strzegom Karmel 150	0.5 kg (6.7%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mackinac	20 g	60 min	10.5 %
Boil	Mackinac	30 g	10 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	22 g	---