

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 | --- |