

APA Leśna

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **53**
- SRM **4.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **70 liter(s)**
- Trub loss **1 %**
- Size with trub loss **73.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **83.9 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **48 liter(s)**
- Total mash volume **64 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **48 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **51.9 liter(s)** of **76C** water or to achieve **83.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Viking Pilsner malt | 15 kg (93.8%) | 82 % | 4 |
| Grain | Melanoiden Malt | 1 kg (6.3%) | 80 % | 50 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|--------|------------|
| Whirlpool | CTZ 90C | 100 g | 30 min | 16.5 % |
| Whirlpool | CTZ 80C | 200 g | 20 min | 16.5 % |