

APA SH Polaris

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **37**
- SRM **3.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **15.8 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.9 liter(s)**
- Total mash volume **11.5 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **8.9 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 2 kg (78.4%) | 80 % | 4 |
| Grain | Pszeniczny | 0.5 kg (19.6%) | 80 % | 4 |
| Grain | Weyermann - Acidulated Malt | 0.05 kg (2%) | 80 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Polaris | 20 g | 15 min | 19 % |
| Aroma (end of boil) | Polaris | 20 g | 0 min | 19 % |
| Dry Hop | Polaris | 60 g | 5 day(s) | 19 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|--------|------------|
| FM52 Amerykański Sen | Ale | Liquid | 30 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------------|-----------------|-----|----------|--------|
| Water Agent | gips piwowarski | 2 g | Boil | 60 min |
| Other | Witamina C | 2 g | Bottling | --- |