

Amarykańskie chmiele

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **25**
- SRM **4.7**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

Steps

- Temp **50 C**, Time **20 min**
- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **17.4 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **60 min** at **65C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 5 kg (86.2%) | 80 % | 4 |
| Grain | Monachijski | 0.5 kg (8.6%) | 80 % | 16 |
| Grain | Strzegom Karmel 30 | 0.3 kg (5.2%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Warrior | 10 g | 60 min | 18.5 % |
| Boil | Warrior | 5 g | 30 min | 15.5 % |
| Boil | Cascade | 30 g | 3 min | 5.6 % |