

Amarillo _ Warrior

- Gravity **12.4 BLG**
- ABV ---
- IBU **49**
- SRM **4.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **55 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **64.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **35.1 liter(s)**
- Total mash volume **48.1 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **35.1 liter(s)** of strike water to **74.5C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **42.7 liter(s)** of **76C** water or to achieve **64.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (38.5%) | 80 % | 5 |
| Grain | Strzegom Pilzneński | 6 kg (46.2%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 2 kg (15.4%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Warrior | 50 g | 35 min | 17 % |
| Boil | Amarillo | 25 g | 20 min | 8.2 % |
| Boil | Amarillo | 25 g | 15 min | 8.2 % |
| Boil | Amarillo | 25 g | 10 min | 8.2 % |
| Boil | Amarillo | 25 g | 5 min | 8.2 % |
| Aroma (end of boil) | Amarillo | 25 g | 5 min | 8.2 % |
| Whirlpool | Amarillo | 25 g | 20 min | 8.2 % |
| Dry Hop | Amarillo | 50 g | 4 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 23 g | Fermentis |