

AMBER ALE 11 blg cytrusowe

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **29**
- SRM **11.6**
- Style **American Amber Ale**

Batch size

- Expected quantity of finished beer **34 liter(s)**
- Trub loss **5 %**
- Size with trub loss **35.7 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **39.3 liter(s)**

Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **28.2 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **22.2 liter(s)** of strike water to **67.7C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **23.1 liter(s)** of **76C** water or to achieve **39.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (66.6%) | 80 % | 5 |
| Grain | Viking Munich Malt | 0.5 kg (8.3%) | 78 % | 18 |
| Grain | Viking Wheat Malt | 0.5 kg (8.3%) | 83 % | 5 |
| Grain | Viking Vienna Malt | 0.5 kg (8.3%) | 79 % | 7 |
| Grain | Special B Castle | 0.167 kg (2.8%) | 70 % | 350 |
| Grain | Caraaroma | 0.34 kg (5.7%) | 78 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------------------------|--------|--------|------------|
| Whirlpool | Amarillo | 27 g | 40 min | 9.5 % |
| Whirlpool | Columbus/Tomahawk/Zeus US | 16 g | 40 min | 15.5 % |
| Whirlpool | Chinook | 9 g | 40 min | 9 % |
| Whirlpool | Cascade PL | 20 g | 40 min | 5.2 % |
| Whirlpool | Centennial | 21 g | 40 min | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------------|-----|-----|------|-----|
| Safale S-04 | Ale | Dry | 10 g | --- |
|-------------|-----|-----|------|-----|

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|---------|--------|
| Water Agent | gips piwowarski | 5 g | Mash | 70 min |