

American Pils -Under pressure

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **43**
- SRM **3.3**
- Style **Classic American Pilsner**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **92 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **50 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pilsner malt | 3 kg (69.8%) | 82 % | 4 |
| Grain | Bestmalz Carmel Pils | 1 kg (23.3%) | 75 % | 5 |
| Grain | Chit Malt Bestmaltz | 0.3 kg (7%) | 50 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 30 min | 13.6 % |
| Boil | Chinook | 20 g | 10 min | 12.1 % |
| Boil | Mosaic | 20 g | 10 min | 10 % |
| Aroma (end of boil) | Chinook | 30 g | 1 min | 12.1 % |
| Aroma (end of boil) | Mosaic | 30 g | 1 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------|-------|-------|--------|------------|
| Oslo Kveik | Lager | Slant | 50 ml | --- |

Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|--------|
| Fining | Whirlfloc | 2.5 g | Boil | 10 min |
| Water Agent | Kwas fosforowy | 3 g | Mash | 90 min |