

EXPF-3/20 SMASH

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **35**
- SRM **3.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

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

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Viking Pilsner malt | 5.5 kg (100%) | 82 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|----------|------------|
| Boil | EXPF-3/20 | 50 g | 30 min | 7 % |
| Boil | EXPF-3/20 | 50 g | 5 min | 7 % |
| Boil | EXPF-3/20 | 50 g | 1 min | 7 % |
| Dry Hop | EXPF-3/20 | 50 g | 2 day(s) | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 150 ml | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|---------|--------|
| Water Agent | Gips Piwowarski | 4 g | Mash | 60 min |
| Water Agent | Sól Epsom | 1 g | Mash | 60 min |