

# Kamil

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **37**
- SRM **7.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **64.5 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **20.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt   | 5.92 kg (87%)  | 80 %  | 5   |
| Grain | Viking Munich Malt     | 0.59 kg (8.7%) | 78 %  | 18  |
| Grain | Viking Carmel Malt 150 | 0.3 kg (4.3%)  | 75 %  | 150 |

## Hops

| Use for             | Name       | Amount  | Time   | Alpha acid |
|---------------------|------------|---------|--------|------------|
| Boil                | Centennial | 30.26 g | 30 min | 11.2 %     |
| Boil                | Cascade    | 39.47 g | 15 min | 5.5 %      |
| Aroma (end of boil) | Cascade    | 39.47 g | 5 min  | 5.5 %      |

## Yeasts

| Name         | Type | Form | Amount  | Laboratory |
|--------------|------|------|---------|------------|
| Safale US-05 | Ale  | Dry  | 28.95 g | Fermentis  |