

Ala Karmi

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **9**
- SRM **25.1**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

- Temp **65 C**, Time **15 min**
- Temp **72 C**, Time **35 min**
- Temp **79 C**, Time **1 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **71.5C**
- Add grains
- Keep mash **15 min** at **65C**
- Keep mash **35 min** at **72C**
- Keep mash **1 min** at **79C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński | 3 kg (73.2%) | 80 % | 4 |
| Grain | Strzegom Karmel 600 | 0.5 kg (12.2%) | 68 % | 601 |
| Grain | Weyermann - Bohemian Pilsner Malt | 0.5 kg (12.2%) | 81 % | 4 |
| Grain | Strzegom Barwiący | 0.1 kg (2.4%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 15 g | 60 min | 3.7 % |
| Boil | Lublin (Lubelski) | 15 g | 10 min | 3.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|---------|-------|------|--------|
| Flavor | Laktoza | 500 g | Boil | 10 min |
|--------|---------|-------|------|--------|