

## #31 AS

- Gravity **12.6 BLG**
- ABV ---
- IBU **11**
- SRM **28.5**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

### Fermentables

| Type  | Name                 | Amount        | Yield  | EBC |
|-------|----------------------|---------------|--------|-----|
| Grain | Strzegom Pale Ale    | 5 kg (89.3%)  | 79 %   | 6   |
| Grain | Strzegom Karmel 600  | 0.2 kg (3.6%) | 68 %   | 601 |
| Grain | Kawowy CastleMalting | 0.2 kg (3.6%) | 75.5 % | 500 |
| Grain | Black of Black       | 0.2 kg (3.6%) | 7.2 %  | 500 |

### Hops

| Use for             | Name        | Amount | Time     | Alpha acid |
|---------------------|-------------|--------|----------|------------|
| Aroma (end of boil) | Amarillo    | 15 g   | 10 min   | 9.5 %      |
| Aroma (end of boil) | Sorachi Ace | 15 g   | 10 min   | 10 %       |
| Whirlpool           | Amarillo    | 15 g   | 0 min    | 9.5 %      |
| Whirlpool           | Sorachi Ace | 15 g   | 0 min    | 10 %       |
| Dry Hop             | Amarillo    | 20 g   | 5 day(s) | 9.5 %      |
| Dry Hop             | Sorachi Ace | 20 g   | 5 day(s) | 10 %       |

### Yeasts

| Name        | Type | Form  | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale  | Slant | 500 ml | Safale     |