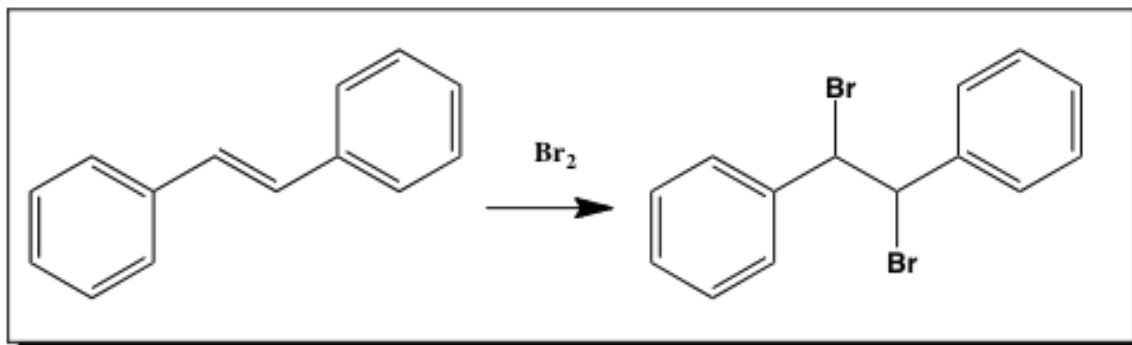


## 1,2-Dibromo-1,2-diphenyl-ethane



### *Techniques*

Dropping to a stirred solution, vacuum filtration, recrystallization.

### *Equipment*

Dropping funnel, vacuum filtration set-up, magnetic stirrer with oil bath and thermometer.

### *Chemicals*

E-Stilbene, bromine (1M solution in  $\text{CH}_2\text{Cl}_2$ ) dichloromethane, xylene

### *Safety*

Bromine is a volatile, extremely corrosive liquid which has to be handled with care.

### Procedure:

- Weigh 1.8 g of E-stilbene into a 100 ml round-bottom flask equipped with a stir bar (use a plastic funnel for small joints to avoid spills!) and dissolve it in 20 ml dichloromethane.
- Install the dropping funnel onto the round-bottom flask and fill in 12ml

of the 1M bromine solution and put a stopper on top. Ventilate from time to time.

- Add the bromine solution slowly drop wise to the stirred solution.
- When all the bromine solution is added continue the stirring for 15 minutes.
- Set up the equipment for vacuum filtration and pour the reaction mixture into the filter.
- Wash the crude product twice with small portions of dichloromethane and continue the vacuum filtration until it is almost dry.
- Transfer the crude product into a 250 ml round-bottom flask determine the weight (don't forget to determine the weight of the empty flask!).
- Add approx. 25 ml of xylene.
- Heat up the stirred suspension until you obtain a clear solution.
- Remove the heater and stop stirring and remove the stir bar.
- After cooling to room temperature the recrystallization is complete and the pure product is isolated again by vacuum filtration.

### Tasks

1. Determine the yield of the air-dried crystals.
2. Determine the melting point of the purified product.

Melting point of 1,2-Dibromo-1,2-diphenylethane = 241°C