Exercise 1.13

Classify each of the following as a pure substance or a mixture. If a mixture, indicate whether it is homogeneous or heterogeneous: (a) rice pudding, (b) seawater, (c) magnesium, (d) crushed ice.

Solution

- (a) Rice pudding is a heterogeneous mixture because you can clearly see the components—the rice and the liquid it's in.
- (b) Seawater is a homogeneous mixture because even though it looks just like water, there's a lot of dissolved salt as well.
- (c) Magnesium is one of the elements, so it's a pure substance.
- (d) Crushed ice is solid H_2O , so it's a pure substance (a compound).