

Sulfur – 2019 June

1. 0620/11,12,13/M/J/19/No.32

Which statement describes a disadvantage of sulfur dioxide?

- A It can be used as a bleach when making wood pulp.
- B It can be used to kill bacteria in food.
- C It can be used to manufacture sulfuric acid.
- D It dissolves in water to form acid rain.

2. 0620/21,22/M/J/19/No.33

Which row shows the conditions used in the Contact process?

	temperature / °C	pressure / atm	catalyst
A	25	2	iron
B	25	200	iron
C	450	2	vanadium(V) oxide
D	450	200	vanadium(V) oxide

3. 0620/12/F/M/19/No.33

Which element has an oxide that is used as a food preservative?

- A helium
- B hydrogen
- C iron
- D sulfur

The Contact process is used to make sulfuric acid.

The steps in the process are listed.

- 1 Dissolve sulfur trioxide in 98% concentrated sulfuric acid.
- 2 Heat sulfur strongly in air.
- 3 Add oleum to water.
- 4 Pass sulfur dioxide over a vanadium(V) oxide catalyst.

Which sequence of steps is correct?

- A 4 → 1 → 2 → 3
- B 4 → 2 → 3 → 1
- C 2 → 1 → 4 → 3
- D 2 → 4 → 1 → 3

