

Safety Data Sheets

Final Assessment Instructor Guide

Note to Instructor

The Safety Data Sheets Assessment tests the learner's knowledge and skill on locating a specific SDS, then extracting, interpreting and applying the information on a Safety Data Sheets. It is recommended that this assessment be used as a post-test after the primary knowledge unit and activity.

This SDS PK is the final unit of the Safety Data Sheet Learning Module.

- SDS Knowledge Probe
- SDS Primary Knowledge
- SDS Activity
- SDS Activity for KOH
- SDS Activity Assessment for KOH
- **SDS Final Assessment** (assesses knowledge and skill in locating, interpreting and applying the information on a SDS)

Instructions

This assessments objective is to assess the learner's ability to locate a SDS, extract information from it and interpret that information for a practical application.

BEFORE BEGINNING THIS ASSESSMENT:

The learner must locate and download at least one SDS for Boron Trifluoride. The learner will need this SDS to answer some of the questions in this assessment.

Below are the assessment questions with answers.

1. Who is responsible for creating and supplying chemical SDSs?
- OSHA
 - NFPA
 - Chemical Manufacturer
 - Chemical user

Answer: c. Chemical Manufacturer

2. Which of the following sections is NOT required by OSHA to be included in a SDS?
- Exposure Controls
 - Handling and Storage
 - Fire Fighting Measures
 - Disposal Considerations

Answer: d.

Disposal Considerations is not required.

3. Which section of the SDS deals with the information concerning the outcomes of inhalation, skin/eye contact, and ingestion?
- First-aid measures
 - Hazard(s) identification
 - Accidental Release measures
 - Physical and Chemical Properties

Answer: a: First-aid measures

4. Which section of the SDS deals with the information related to fire hazard, extinguishing media and Flashpoint?
- Physical and Chemical Properties
 - Accidental Release Measures
 - Fire and Explosion Data
 - Exposure Controls

Answer: c. Fire and Explosion Data

5. For a hazardous ingredient to be listed on the SDS, it must comprise what percent of the chemical?
- 0.1% or more
 - 1.0% or more
 - 5.0% or more
 - 10% or more

Answer: b. 1.0% or more

6. Which of the following indicates the toxicity of a chemical?
- a. A vapor density of 4.6
 - b. Incompatible with water
 - c. Upper explosion limit of 16.3%
 - d. TLV of 25 ppm

Answer: d.

The Threshold Limit Value (TLV) indicates a chemical's toxicity

7. Which section of a SDS indicates which "conditions / materials to avoid"?
- a. Toxicological Information
 - b. Physical and Chemical Properties
 - c. Exposure Controls
 - d. Stability and Reactivity Data

Answer: d. Stability and Reactivity Data

8. Refer to the SDS for Boron Trifluoride. List three (3) physical characteristics of BCl_3 .

Answer:

It's a gas, incompatible with water, corrosive, colorless, pungent odor

9. Refer to the SDS for Boron Trifluoride. This chemical has a health hazard rating of 4. List the characteristic(s) of BCl_3 that would substantiate this rating?

Answer:

BCl_3 is very toxic by inhalation and very corrosive to eyes, respiratory system and skin.

10. Refer to the SDS for Boron Trifluoride. You enter the service aisle and notice that your co-worker has passed out. Due to the circumstances, you can safely assume it is due to inhalation of boron trifluoride gas. What would be a correct response procedure?

Answer:

Put on a self-contained breathing apparatus and remove your co-worker to an uncontaminated area. Keep the victim warm and call for the medical emergency team. Apply artificial respiration if breathing stops.

11. Refer to the SDS for Boron Trifluoride.
Scenario: You are a member of the emergency response team for spills and leaks. What would be a correct procedure when responding to an accidental release of boron trifluoride?
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Answer:

Wear a self-contained breathing apparatus and corrosive protective wear.

Evacuate the affected area.

Close the main source valve if possible before entering the area.

12. Refer to the SDS for Boron Trifluoride. Which of the following BEST describes the reactivity properties of Boron Trifluoride?
- Stable under normal conditions, but incompatible with water and some metals.
 - Reacts violently with water and heat
 - Unstable under most conditions. Avoid water. Corrodes some metals.
 - Stable under most conditions, but reacts violently when exposed to wet metals.

Answer: a.

BCl_3 is stable under normal conditions, but does have some incompatibles such as water and some metals.

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