

Step-by-Step Job Aid: How to Use the Hazardous Materials Table (HMT)

Purpose: This job aid provides a step-by-step guide on how to correctly use the Hazardous Materials Table (HMT) in **49 CFR 172.101** to ensure **proper classification, labeling, packaging, and transport of hazardous materials**.

Step 1: Identify the Hazardous Material

- Locate the **Proper Shipping Name** of the hazardous material in **Column 2**.
- Verify that the name matches the shipping papers exactly.
- If the material has multiple names, choose the most accurate based on its properties.

✓ **Example:** If transporting **Gasoline**, find "Gasoline" in **Column 2**.

Step 2: Confirm the UN/NA Identification Number

- Look at **Column 4** for the **four-digit UN or NA number**.
- This number is used for **placards, labels, and documentation**.

✓ **Example:** Gasoline is listed as **UN1203**.

Step 3: Determine the Hazard Class

- Check **Column 3** to find the **hazard class or division**.
- This classification determines **handling, labeling, and transport regulations**.

✓ **Example:** Gasoline is classified as **Class 3 – Flammable Liquid**.

Step 4: Identify the Packing Group (PG)

- Look at **Column 5** to determine the **degree of hazard**:
 - **PG I** – High danger
 - **PG II** – Medium danger
 - **PG III** – Low danger

- The **packing group** affects packaging and transport requirements.

✓ **Example:** Gasoline is assigned **PG II (Medium hazard)**.

Step 5: Determine Labeling and Marking Requirements

- **Column 6** specifies the **required hazard warning labels**.
- **Column 4 (UN Number)** must be **displayed on the package and shipping papers**.

✓ **Example:** Gasoline requires a **Class 3 (Flammable Liquid)** label.

Step 6: Review Special Provisions

- **Column 7** lists additional special provisions that may apply.
- These provisions include:
 - **Handling and stowage instructions**
 - **Packaging exemptions**
 - **Emergency response guidelines**

✓ **Example:** Special provisions might limit **air transport** for specific chemicals.

Step 7: Check Packaging Requirements

- **Column 8** contains references to:
 - **Non-bulk packaging requirements**
 - **Bulk packaging regulations**
 - **Aircraft-specific packaging rules**
- Ensure that the **correct containers and securement methods are used**.

✓ **Example:** Gasoline must be transported in **DOT-approved drums, tanks, or containers**.

Step 8: Verify Transportation Mode Restrictions

- **Column 9:** Identifies **quantity limitations for air transport**.
- **Column 10:** Specifies **vessel stowage requirements for water transport**.
- Verify that the shipment **complies with all mode-specific regulations**.

✅ **Example:** Gasoline is **not permitted on passenger aircraft**.

Step 9: Ensure Proper Placarding

- The required placards depend on:
 - **Hazard class (Column 3)**
 - **UN Number (Column 4)**
 - **Quantity and mode of transport**
- Check **49 CFR 172.500** for specific placarding requirements.

✅ **Example:** A bulk shipment of gasoline must display **Class 3 (Flammable Liquid)** placards on all four sides.

Step 10: Confirm Compliance Before Transport

- Double-check **all required markings, labels, and documentation**.
- Verify **shipping papers include all required HMT details**.
- Ensure the shipment follows **state and federal transportation route restrictions**.

Final Reminder:

- **If in doubt, consult your supervisor or compliance officer.**
 - **The HMT is mandatory for hazardous materials transport—using it correctly ensures safety and compliance.**
-

Next Steps:

- Review the **Quick-Reference Guide on the Hazardous Materials Table**
- Take the **Scenario-Based Quiz** to test your understanding