

Hazardous Materials Inventory Statement (HMIS) – Instructions

WHEN COMPLETE, SAVE FORM AND EMAIL TO HAZMAT@HOWARDCOUNTYMD.GOV

The included hazardous materials inventory statement must be submitted with the hazardous materials permit application, regardless of which type of permit applies to the occupancy in question. The following guidelines are intended to assist you in completing the form. Much of the information needed can be easily obtained by referencing the Safety Data Sheets (SDS) for each substance.

What Products Should Be Reported on the HMIS?

- Include containers that are marked with US Department of Transportation (DOT) hazard labels, such as “Flammable Liquid”, “Corrosive”, “Explosive”, or “Organic Peroxide”
- Include all compressed gas cylinders marked with a DOT Hazard Label
- Include all Extremely Hazardous Substances (EHS) as listed in 40 CFR Part 355 – Emergency Planning and Notification, Appendix A
- Include products with the US Environmental Protection Agency warning label of “Danger” or “Warning”
- Include all substances referenced in Chapter 1 of NFPA 1
- Include mixtures on the statement, and attach Appendix A for mixture details
- When in doubt, include the substance or chemical

What can be excluded from the HMIS?

- Office supplies such as ink, toner, or correction fluid
- Cleaning products intended for consumer use
- Solder and solder flux
- Any other exemption provided for under Title 40 CFR, Part 370

When completing the inventory statement, if more space is needed, simply use additional pages and record the total page numbers in the spaces provided in the lower right corner. When filling out the date, please use two digits for the year.

1. Include the **Chemical or trade name** in the IUPAC or scientific form if possible. If the name is only known by a trade or proprietary name, write “trade” after the name. For example – *MethylTestChem (trade)*
2. Include the **CAS Number** (Chemical Abstract Service number). Every chemical made has an associated CAS number. This can be found in the SDS.
3. Write the **Concentration (%)**. If a product is in a pure state, it should be indicated as “100%”. If it is a weaker solution, write the concentration as indicated on the SDS. If the product is a mixture of several chemicals, write “MIX”, check the Mixture box, and follow the instructions for the mixture form.
4. Describe the **Physical State** of the product. Most chemicals will be listed as a solid, liquid, or gas. The following exceptions exist:
 - a. Aerosol products should be listed as “**aerosol**”
 - b. Products like propane and ammonia should be listed as “**liquefied gas**”
 - c. Cryogenic fluids should be listed as “**cryogen**”
 - d. Compressed gases should be listed as “**compressed gas**”
5. For **Maximum Daily Amount**, write the total amount of this chemical on site at any given time. This is not the average daily amount, but the actual maximum as this could be the amount that responders encounter.
6. Under the **Units** column, include what the maximum daily amount is measured in. Typical measurements are “pounds”, “gallons”, “cubic feet”, or “tons”.
7. Declare whether the substance is an **Extremely Hazardous Substance (EHS)** or not. Refer to Title 40 CFR, Part 355, Appendix A for a list of EHS’.

8. Determine what **Hazard Class** the substance qualifies as. Hazard classes are based on the DOT classification system and include terms such as "Oxidizer", "Flammable Solid", and "Radioactive". Be sure to include the letter for all applicable hazard classes for each substance.

<u>Class 1 - Explosives</u>
A = Division 1.1 Explosives with a mass explosion hazard
B = Division 1.2 Explosives with a projection hazard
C = Division 1.3 Explosives with predominantly a fire hazard
D = Division 1.4 Explosives with no significant blast hazard
E = Division 1.5 Very insensitive explosives with a mass explosion hazard
F = Division 1.6 Extremely insensitive articles
<u>Class 2 - Gases</u>
G = Division 2.1 Flammable gases
H = Division 2.2 Non-flammable, non-toxic gases
I = Division 2.3 Toxic gases
<u>Class 3 - Flammable liquids</u>
J = All of Class 3 Flammable and combustible liquids
<u>Class 4 - Flammable Solids; Spontaneously combustible materials; and Dangerous when wet materials/Water-reactive substances</u>
K = Division 4.1 Flammable solids
L = Division 4.2 Spontaneously combustible materials
M = Division 4.3 Water-reactive substances / Dangerous when wet materials
<u>Class 5 - Oxidizing substances and Organic peroxides</u>
N = Division 5.1 Oxidizing substances
O = Division 5.2 Organic peroxides
<u>Class 6 - Toxic substances and Infectious substances</u>
P = Division 6.1 Toxic substances
Q = Division 6.2 Infectious substances
<u>Class 7 - Radioactive materials</u>
R = All of Class 7 Radioactive materials
<u>Class 8 - Corrosive substances</u>
S = All of Class 8 Corrosive substances
<u>Class 9 - Miscellaneous hazardous materials / Products, Substances or Organisms</u>
T = All of Class 9 Miscellaneous hazardous materials / Products, Substances or Organisms

9. To determine the **Storage Location**, use the following classifications (enter only the letter in the column):

<u>Location</u>	<u>Type</u>	<u>Storage Systems</u>
A = Inside	1 = Open System	3 = Mechanical Process Used (i.e. stirring)
B = Outside Above Ground	2 = Closed System	4 = No process
C = Outside Below Ground		

10. The information in the Storage Code provide information on the type of container, the typical storage pressure, and the typical storage temperature. Therefore, ensure that you enter a letter and two digits in this column.

<u>Type</u>	<u>Pressure</u>
A = Tank	1 = Ambient (Atmospheric)
B = Steel Drum	2 = Greater Than Ambient
C = Plastic or Nonmetallic Drum	3 = Less Than Ambient
D = Can	
E = Carboy	
F = Silo	
G = Fiber Drum	
H = Bag	
I = Box	
J = Cylinder	4 = Ambient
K = Glass Bottle or Jugs	5 = Greater Than Ambient
L = Plastic Bottles or Jugs	6 = Less Than Ambient- (but not cryogenic (< 150°F))
M = Tote Bin	7 = Cryogenic Conditions (< 150° F)
N = Tank Wagon	
O = Rail Car	
P = Other	

11. Check the box for **Mixture** if the substance contains more than one thing. If you check this box, you need to also fill out the Hazardous Materials Inventory Statement – Appendix A to provide the necessary information on the makeup of the mixture.

Appendix A

This form is used any time the product included on the HMIS is identified as a mixture. The product name is referenced in the first box, and the constituents are listed under Hazardous Components with their individual corresponding CAS numbers. Ensure the makeup percentage of each is recorded. Finally, declare whether or not this substance is mixed on-site or not. If it is mixed on-site, the individual components will also be found on the HMIS individually.