

Using Electronic Resources to Gather Hazmat Information

Overview

Electronic resources are useful tools for emergency responders and others with potential exposures to hazardous materials. In this exercise you will use several online resources to gather information needed in response to a scenario.

Objectives

When complete you will better be able to:

- Access electronic resources
- Demonstrate the use of online resources to gather information and complete a worksheet in response to a scenario

Gather Information

Use online resources to complete the hazardous substance information worksheet on the next several pages for the following scenario or another scenario provided the facilitator:

Your emergency response team has been called to the chemical supply room at your manufacturing facility. The area supervisor indicates that a 400 gallon intermodal container or tote containing (acetone or other flammable liquid) has developed a significant leak around its valve assembly. All workers have been evacuated from the area, but a large pool of product, estimated to be approximately 100 gallons, is on the floor.

Hazardous Substance Information Worksheet

Product Identification:

Common Name:		Chemical Name:		
DOT Class:	Shipping Label:	ID #:	CAS #:	
Manufacturer:				
NFPA 704:	Health (Blue):	Flammability (Red):	Reactivity (Yellow):	Special Hazards:

Weather Conditions:

Temperature:	Humidity:	Precipitation:	Sky:
Dew Point:	Barometric Pressure:	Inversion Height:	
Wind Direction:	Wind Speed:	Forecast:	

Physical Properties:

Reference Sources: (Consult three different sources)	#1: Page:	#2: Page:	#3: Page:
Physical Description:			
Color:			
Odor:			
Odor Threshold:			
Specific Gravity:			
Relative Gas Density:			
Vapor Pressure:			
<input type="checkbox"/> Boiling/ <input type="checkbox"/> Condensing Point:	F	F	F
Melting/ Freezing Point:	F	F	F
Expansion Ratio for gases:			
Solubility In Water:	<input type="checkbox"/> Y <input type="checkbox"/> N %	<input type="checkbox"/> Y <input type="checkbox"/> N %	<input type="checkbox"/> Y <input type="checkbox"/> N %
Soluble With What:			
Degree Of Solubility:			
Molecular Weight:			
Conversion from mg/m ³ to ppm: 24.45 x TLV (mg/m ³) / MW			
Other:			

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Flammability Properties: Yes No

Reference Sources:	#1: Page:	#2: Page:	#3: Page:
LEL:			
UEL:			
Flash Point:	F	F	F
Autoignition Temperature	F	F	F
Decomposition:	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N
Explosion Potential:	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N
Toxic Products of Combustion:			
Extinguishing Agents:			
Other:			

Reactivity Properties: Yes No

Reference Sources:	#1: Page:	#2: Page:	#3: Page:
Pyrophoric:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Explosive:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Polymerization:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
With what other chemicals?			
Other:			

Corrosive Properties: Yes No

Reference Sources:	#1: Page:	#2: Page:	#3: Page:
Skin:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Metal:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
pH:			
Neutralizing Agent:			
Other:			

Radioactive Properties: Yes No

Reference Sources:	#1: Page:	#2: Page:	#3: Page:
Alpha			
Beta:			
Gamma:			
Neutrons:			

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Toxicity Properties: Yes No

Reference Sources:	#1: Page:	#2: Page:	#3: Page:
PEL:			
TLV:			
REL:			
IDLH:			
TWA:			
STEL:			
CEILING:			
LD ₅₀			
LC ₅₀			
Inhalation:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Ingestion:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Skin Absorption:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Eye Absorption:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Carcinogen:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Teratogen:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Mutagenic:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Aquatic:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other:			

Target Organs: Yes No

Reference Sources:	#1: Page:	#2: Page:	#3: Page:

Exposure Signs/Symptoms:

Reference Sources:	#1: Page:	#2: Page:	#3: Page:

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Recommended PPE:

Reference Sources:	#1: Page:	#2: Page:	#3: Page:
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First Aid:

Reference Sources:	#1: Page:	#2: Page:	#3: Page:
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Mitigation Procedures:

Reference Sources:	#1: Page:	#2: Page:	#3: Page:
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Shelter, Protection, Evacuation Procedures:

Discuss

Be ready to discuss the following:

- Who would compile the information in the worksheet?
- How would information developed on this form be used in the Incident Command System or at your workplace?
- Using information from the worksheet, prepare an entry briefing for your staff.
- What information on this form would be of value for making strategic decisions regarding:
 - PPE?
 - DECON?
 - Evacuation?
 - Hazard Control?