

# **Safety Meeting Overview**

The weekly safety meeting is intended to be conducted by the supervisor or lead in their small group(s). This guide contains everything that is needed to conduct a meaningful small group safety meeting. This contains the following:

- Meeting Notice
- Leaders Guide
- Employee Handout, Quiz and Puzzle
- Meeting Sign-In Sheet

Weekly safety meetings are not optional and must be conducted each week. If an employee is absent from the training – it is the responsibility of the supervisor or lead to conduct a make-up session to ensure that all employees have been trained. Training records (meeting sign-in sheets) must be turned into the Plant Manager each week.

#### PRIOR TO THE WEEKLY MEETING:

- Post the meeting notice in your area where your employees will see it.
- Read through the Leaders Guide and Employee Handout to familiarize yourself with the topic for the week
- Make copies of the employee handout (one for each employee)

#### AT THE SAFETY MEETING:

- Pass around the meeting sign-in sheet ensure all employees present at the meeting print and sign their names
- Pass out the employee hand-out, quiz and puzzle
- Conduct the meeting keep the meeting simple
- Encourage discussion and questions



# **WEEKLY SAFETY MEETING NOTICE**

# THIS WEEK, OUR SAFETY MEETING WILL COVER SOLVENTS

SHIFT: _		
TIME:		
DATE: _		
PLACE:		



#### **Leaders Guide**

#### PROCEDURE REFERENCE:

NONE

#### **MEETING OBJECTIVE:**

Solvents are useful materials, and you find them in just about every work area. Employees need to know how to handle and store these chemicals safely. The purpose of this meeting is to review the hazards associated with solvents and to instruct employees in safe procedures, including the use of required PPE.

#### **MEETING PREPARATION:**

Read the Signature procedure, understand the contents, and ensure compliance.

Make a list of all the solvents used at your facility. Note the special precautions that must be taken for storage and use. Also, note required PPE that should be used.

Make copies of at least one SDS for a solvent on your list. Bring copies to the meeting for all employees.

Find an approved solvent container, empty and properly labeled. Bring it to the meeting. Review the employee handout to see if there are any other materials you wish to bring to the meeting.

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Use a flip chart during the discussion to write key points and employee responses. This technique visually reinforces your instruction.

#### **MATERIALS CHECKLIST:**

List of solvents used (with required PPE) Copies of MSDSs Sample solvent container with label Flip chart and marking pens



#### Leaders Guide

#### MEETING INTRODUCTION

Extreme caution must be taken when working with and around solvents. Today we're going to discuss the solvents you use on the job and the steps you must take to protect yourselves and others from harm when using them.

Solvents are extremely useful and relatively common in the workplace. Yet they pose serious fire and health hazards if not used and stored carefully. Material Safety Data Sheets (MSDSs) and container labels can help indicate the proper precautions that must be taken when using or storing these materials, including information about required PPE. MSDSs and labels also explain the hazards to health and property.

Question: How can solvents be hazardous to your health?

Answer: Direct exposure can cause irritation to eyes, skin, and mucous

membranes.

Overexposure to vapors can affect the central nervous systems, resulting

in fatigue and /or lack of muscular coordination.

Exposure to high heat sources can break solvents into highly toxic gases.

Question: What are the basic rules for working with solvents?

Answer: Pay attention to warning signs. They tell you if solvents are present and

what you should and shouldn't do around them.

Read all labels carefully. You should always read the labels on containers of materials you handle. If no label is present, do not use the material until you've learned the necessary safety precautions. (Point to the appropriate information on the label.) The label will tell you what is in the container and possible hazards. Other information can include precautions you should take, symptoms of overexposure, what to do in case of

overexposure, where to find further information, and safety equipment

use.

Get additional information when in doubt. Consult the SDS. It provides

vital information about solvents.



#### Leaders Guide

<u>Ask questions</u> if you don't understand. Ask any supervisor – not a coworker. Your co-worker may not know the correct answer to your question.

**Distribute** copies of SDSs and go through one with employees so that they know where and how to find the information they need.

**Show** employees the sample solvent can you brought with you to the meeting. Pass it around so that each employee has a chance to see the information on the label.

Question: How can you protect yourself from exposure to solvents in the workplace?

Answer: Wear eye and face protection when working with or around solvents.

Wear skin protection. Neoprene gloves will protect against most solvents. Be sure other glove materials are compatible with the solvent being used. Also, rubber or neoprene aprons are needed in case splashing occurs.

Take precautions in cold-cleaning operations. Protect against escaping vapors by wearing required PPE, using adequate ventilation, and avoiding drawing vapors into the work area when removing cleaned parts.

Use soap or mild detergent and water rather than solvents to clean grease, oil, dirt, or anything else off your skin.

Place all rags, waste, paper towels, etc., wetted with solvent in airtight, all-metal safety containers and replace covers.

Store and transport small quantities of solvent only in appropriate safety containers, properly marked.

Use required respiratory equipment when you enter areas where solvent vapor levels are – or might be – high. Don't rely on your nose to warn you of excessive concentrations – some dangerous vapors may have no odor warning at all.

**Discuss** required PPE for the handling of solvents used at your facility.



#### **Leaders Guide**

Question: What precautions do you need to take to prevent fire when handling

or storing solvents?

Answer: All sources of ignition should be removed from solvent use areas.

No Smoking rules must be enforced.

In high-hazard areas, all fixed and portable electrical equipment should be

explosion-proof.

Know when combustible solvents may react explosively.

Flammable and combustible solvents should be used and transported in proper safety containers with flame arresters and lids in good repair and with the contents properly labeled.

Dispose of solvent wetted materials in appropriate waste containers, away from sources of ignition.

When transferring flammable and combustible solvents always electrically ground and bond containers to prevent static sparks.

#### Question: How can you prevent solvent vapors from becoming a hazard?

Answer:

When a high concentration of flammable vapor is produced, and a source of ignition is supplied, a fire or explosion may result. For example, when the exterior of a closed tank of a combustible solvent is welded, the high heat can create a vapor mixture which is a fire or explosion hazard. That's why the following precautions are so important:

- Make sure exhaust ventilation is working properly. Report any problems to your supervisor at once.
- Wear the proper respirator when necessary.
- Measure oxygen content and perform an explosivity check prior to entry into any low-lying area or confined space where solvent vapor could accumulate. Many solvent vapors are heavier than air and may accumulate at floor level, in pits, or other areas.



#### Leaders Guide

**Discuss** proper storage procedures for solvents in your department. Note that special safety cabinets and/or special fire-rated rooms may be required in cases where large quantities of solvents are stored.

**Explain** emergency response procedures for accidents involving solvents.

#### Overexposure (vapor):

Call for emergency medical assistance immediately.

Move victim to fresh air, if there's no chance of back injury or broken bones.

Wear proper PPE to protect yourself.

CPR or mouth-to-mouth resuscitation may be required.

#### Spills:

Evacuate and isolate the area.

Notify appropriate personnel.

Clean up spill according to safe procedures, if authorized to do so, using the appropriate PPE.

Dispose of waste material as directed.

#### Fire:

Sound the alarm

Begin evacuation

Use only fire extinguishers that are compatible with the situation.

#### **SUMMARY:**

Solvents are useful chemicals that we rely on to help us in many ways. We must always be aware of their hazards, too. Safe and effective use and storage of solvents requires you to get the information you need from SDSs, labels, and a supervisor, and then act on that information exactly as instructed.

#### **EMPLOYEE HANDOUT**

- A. Employee Handout
- B. Employee Quiz
- C. Employee Puzzle



#### What is a solvent?

Solvents are chemicals used to thin or dissolve paint, grease, epoxies, adhesives, and coatings. There are many different types of solvents. Some are found under their chemical name and some are added to products.

#### **Common chemical names:**

- 1-Bromopropane
- Acetone
- Benzene
- Denatured alcohols
- Methyl ethyl ketone (MEK)
- N-Hexane
- Perchlorethylene
- Petroleum distillates (naptha, mineral spirits, gasoline, kerosene)
- Toluene
- Tricholorethylene
- Xylene

#### **Common products containing solvents:**

- Adhesives
- Cleaners
- Degreasers
- Epoxies and resins
- Lubricants
- Paints and coatings
- PVC glue
- Thinners

#### What is the risk?

According to NIOSH, solvents are hazardous to your health when:

- ➤ Breathed in Solvents can evaporate quickly into a vapor. Inhaling the vapor can irritate or burn your nose, throat and lungs. You can smell solvents that have a strong odor but some have no order.
- ➤ Touched Solvents can irritate the skin causing dryness and cracks. Do not wash your hands with a solvent.
- ➤ Swallowed solvents that get into your mouth and stomach can irritate to burn your mouth, throat, stomach and intestine. Wash your hands before eating or drinking.

Solvents can get into your bloodstream when they are breathed in, touched or swallowed. Once in your blood, they can travel throughout your body causing serious health effects. In the short term, they can make you feel dizzy, sleepy, nauseous, or give you a headache. Long term exposure to solvents can damage your nervous system, reproductive system, liver, kidneys, respiratory system, and cause cancer.

Solvents are also flammable. If they catch on fire, you can be burned.

# **SOLVENTS Meeting Sign-In Sheet**

MEETING DATE:		LOCATION:					
SHIFT:		CONTENTS OF MEETING:	☐ Handout	☐ Video			
			☐ Otner	☐ Guest Speaker			
MEETING CONDUCTED BY:				•			
GUEST SPEAKER (if applicable)	):						
ATTENDEES:							
NAME(Print)	SIGNATURE	NAME(Print)	SIGNATU	IRE			
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### **Employee Quiz**

- 1. How can you protect yourself from exposure to solvents in the workplace?
  - a. Wear eye and face protection, wear skin protection.
  - b. Nothing
  - c. Hold an umbrella
- 2. You get a chemical in your eye. What should you do?
  - a. Nothing
  - b. Immediately flush with water, continue washing for 15 minutes, tell your supervisor
  - c. Go to the restroom and rinse with water, because the water is better there
- 3. How do you prevent solvent vapors from becoming a hazard?
  - a. Fan with your hand.
  - b. Make sure exhaust ventilation is working properly. Wear the proper respirator.
  - c. Nothing
- 4. Keep solvents away from:
  - a. Heat, flames, and other ignition sources
  - b. Nothing
- 5. You can eat, drink, or leave food, beverages, utensils, etc. in areas with solvents.
  - a. True
  - b. False
- 6. You can wear contact lenses when using solvents.
  - a. True
  - b. False
- 7. Most solvents are poisonous if they are swallowed, their vapors inhaled, or they are absorbed through the skin.
  - a. True
  - b. False



# **Employee Puzzle**

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M	P	G	I	M	S	0	R	F	R	U	U	В	Y	N
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boil
chlorination
chromatography
colloid
condensation
crystal
dilute
dissolve
emulsify

emulsion
endothermic
evaporate
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filtration
fog
gas
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saturated

sea
solid
solubility
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solute
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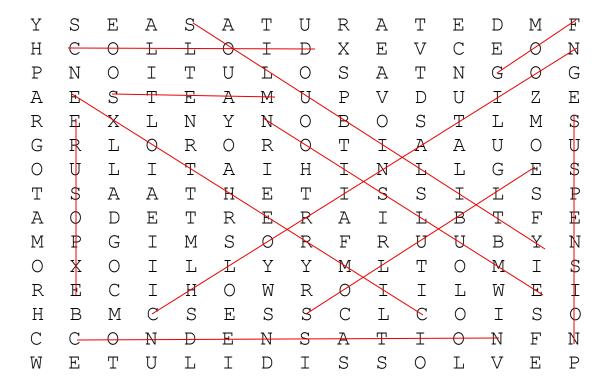
# **Employee Quiz -ANSWERS**

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	b.	Nothing
	c.	Hold an umbrella
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	a.	Nothing
	b.	Immediately flush with water, continue washing for 15 minutes, tell
		your supervisor
	c.	Go to the restroom and rinse with water, because the water is better
		there
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Ο.	-	Fan with your hand.
	a.	
	b.	Make sure exhaust ventilation is working properly. Wear the proper
		respirator.
	c.	Nothing
4.	Keep solv	vents away from:
	a.	Heat, flames, and other ignition sources
	b.	Nothing
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_	V	
5.	You can	eat, drink, or leave food, beverages, utensils, etc. in areas with solvents.
	a.	True
	b.	False
6.	You can	wear contact lenses when using solvents.
-	a	True
	b.	False
	υ.	I disc
_		
1.		vents are poisonous if they are swallowed, their vapors inhaled, or they
	are absor	bed through the skin.
	a.	True



# **Employee Puzzle Answers**



chlorination	emulsion	solubility
colloid	exothermic	soluble
condensation	exposure	steam
	fog	suspension