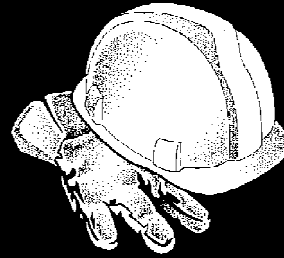



# TRAINING GUIDE

## ADHESIVES & RESINS



1994

*Before you begin the meeting...*

- Does this topic relate to the work the crew is doing? If not, choose another topic.
- Has the crew completed basic Hazard Communication training? It will help them understand this topic.
- Did you read this Training Guide and fill in the blanks where the  appears? (To find the information you need, look over the Safety Walkaround Checklist for this topic.)
- Did you bring labeled containers and Material Safety Data Sheets (MSDSs) for a few of the adhesive and resin products used on the site?

*Begin:* Adhesive and resin products are part of everyday life on construction sites. **Adhesives** include glues, mastics, and contact cements. **Resins** are found in many products, including sealants, foams, protective coatings, varnishes, and paints.

Different adhesives and resins have different hazards. Some are quite safe to work with, but with others you have to be very careful. They may be flammable, toxic, or both.

*You or a crew member may want to add a personal story about adhesives or resins.*

*Next, discuss with the crew what hazardous adhesive or resin products are used at this particular job site, and where:*



### ASK THE CREW THESE QUESTIONS:

*After each question, give the crew time to suggest possible answers. Use the information following each question to add points that no one mentions.*

#### 1. What are some ways adhesives and resins can harm you?

- Many of these products are **flammable** or **combustible**.
- Some products can cause **irritation** or **burns** if you get them on your skin.
- Some products can cause **allergic reactions**. If you have contact with the product, your skin may become dry, scaly, and cracked. If you breathe the vapors, you may experience coughing, sneezing, chest congestion, or an asthma-like reaction.

- Many products contain **hazardous solvents**. Breathing certain solvent vapors can cause dizziness, a light-headed feeling, lack of coordination, or trouble concentrating. These effects can be especially dangerous on a construction site. You need to be alert and keep your balance at all times.
- High exposure to certain solvents can cause immediate coma or death. Even a small exposure over a long period of time can permanently damage your liver, kidneys, and nervous system (including the brain).

**2. Some products are more hazardous than others. How can you find out if there are harmful chemicals in the adhesive or resin product you're using?**

- **Don't open the container** until you've found out what's in the product and what the hazards may be.
- Check the **label**. You may find a list of ingredients, a safety warning, or both. All containers must be labeled, or a labeled container must be in the immediate area.
- Read the **Material Safety Data Sheet (MSDS)** for the product. MSDSs are required by law, and everyone working on the site has a right to see them.

*(MSDSs are covered in more detail during basic Hazard Communication training, which everyone on the crew should already have completed.)*

**3. What can the MSDS tell you about a product?**

- The **hazardous ingredients** in the product, and the **safe exposure level** for each one. Cal/OSHA has set **permissible exposure limits (PELs)** for many hazardous chemicals. The company has to keep your exposure below these limits.
- The **flammability** of the product, and fire prevention measures you need to take.
- What kinds of **personal protective equipment** you need (like a respirator or gloves).
- The **volatility** of the product (the likelihood that vapors will get in the air). Highly volatile products are more dangerous for two reasons. They may be more likely to catch fire, and there's also more danger of breathing the vapors. Keep containers of highly volatile liquids tightly closed as much as possible.
- How to **store** the product safely. For example, some products should be stored away from heat, light, or water. Some should never be stored near other products with which they could have a chemical reaction. (These are called **incompatible** chemicals.)
- How to **dispose** of the product safely. For example, some products should never be dumped into the drain or sewer.

On this job, you can get MSDSs from-



*Give the name and location of the person to see:* \_\_\_\_\_

Let's look at some labels and MSDSs for adhesive and resin products we use on this job.

*Show the crew the sample product containers and MSDSs you brought to the meeting. Explain them briefly.*




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#### 4. What are some ways to protect yourself from exposure?

- Use a **safer product** if possible. Some products are much less hazardous than others.
- Work in a **well-ventilated** area. A fan or open door may not be enough. Also watch out for vapors from **drying** products. If you're working outdoors, try to stay **upwind**.
- **Stop** what you're doing if you notice symptoms. You may need to change the way you're doing the work, or wear protective equipment (like a respirator or gloves).
- Use a **respirator**. If you need one, we must provide the right type of respirator, make sure it fits, teach you how to use it, and give you a physical to make sure you're able to wear it safely. (*Respirators are covered in more detail in a separate Training Guide.*)

We  will or  will not require respirators on this job.



If required, respirators are available at: \_\_\_\_\_

- Keep adhesives and resins off your **skin** and out of your **eyes**. If necessary, wear gloves and goggles. If chemicals do get in your eyes, flush with water for 15 minutes.
- **Don't eat, drink, or smoke** on the job. Anything you put in your mouth could have been contaminated by chemicals. Wash up first.

#### 5. Many adhesive and resin products are flammable. How do you prevent fires and explosions?

- Read the **label** and **MSDS** to find out what special precautions to take.
- **Don't smoke**.
- **Avoid heat and sparks**—for example, from sparking power tools.
- Keep flammable liquids away from **rags** and other materials that might ignite.
- **Bond and ground** the containers when you transfer flammable liquids.
- **Store** flammables in tightly closed, approved containers or metal storage cabinets.
- Keep **fire extinguishers** readily available, and make sure they are the right type. Different fire extinguishers are needed for different kinds of fires.

### CAL/OSHA REGULATIONS

*Explain:* Most of the safety measures we've talked about are required by Cal/OSHA. We have to take these precautions—it's the law. I have a Checklist of the Cal/OSHA regulations related to adhesives and resins. If you'd like to know more, see me after the meeting.

### COMPANY RULES

*(Only if applicable.)* Besides the Cal/OSHA regulations, we have some additional company rules about hazardous chemicals like adhesives and resins.

*Discuss company rules:* \_\_\_\_\_



### COMMENTS FROM THE CREW

*Ask:* **Do you have any other concerns about adhesives or resins? Do you see any problems on our job?** (*Let the steward answer first, if there is one.*)

**What about other jobs you've worked on? Have you had any experience with adhesives or resins that might help us work safer on this job?**

## GENERAL SAFETY DISCUSSION

*This is a time to discuss all safety concerns, not just today's topic. Keep your notes on this page before, during, and after the safety meeting.*

**Are you aware of any hazards from other crews?** *Point out any hazards other crews are creating that this crew should know about. Tell the crew what you intend to do about those hazards.*

**Do we have any old business?** *Discuss past issues/problems. Report progress of investigations and action taken.*

**Any new business? Any accidents/near misses/complaints?** *Discuss accidents, near misses, and complaints that have happened since the last safety meeting. Also recognize the safety contributions made by members of the crew.*

**Please remember, we want to hear from you about *any* health and safety issues that come up. If we don't know about problems, we can't take action to fix them.**

*To complete the training session:*

- Circulate Sign-Off Form.*
- Assign one or more crew member(s) to help with next safety meeting.*
- Refer action items for follow-up. (Use the sample **Hazard Report Form** in the Reference Section of this binder, or your company's own form.)*

# SIGN-OFF FORM

## ADHESIVES & RESINS

Date Presented: \_\_\_\_\_ By: \_\_\_\_\_

Project Name/No.: \_\_\_\_\_ Location: \_\_\_\_\_

### **NAMES OF THOSE WHO ATTENDED THIS SAFETY MEETING**

| <i>PRINTED NAME</i> | <i>SIGNATURE</i> |
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