A guide for the safe handling of WEST SYSTEM® brand epoxies

Working with epoxy can be highly rewarding, as well as safe. Serious health problems associated with epoxy use are uncommon. Most epoxy-related health problems are minor, but they can cause discomfort and diminish the rewards of working with it. Fortunately, these problems are preventable.

As an epoxy user, you should be concerned about health and safety, and be well informed of the materials and products you use. This guide covers the health hazards of working with WEST SYSTEM epoxies, and some related shop hazards. More importantly, it offers common sense safety practices that will help prevent health problems and assure your long and productive use of epoxy.

Please read this entire guide. Read and follow all product label directions and warnings. Refer to the Material Safety Data Sheet (MSDS) for detailed product safety information.

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Understanding overexposure

When we select raw ingredients for WEST SYSTEM epoxy products, we search for a balance between desired physical properties and lowest human and environmental health risks. Epoxy resins, hardeners and fillers are comprised of a number of chemical ingredients, of varying proportion and toxicity. Fortunately, they contain only a very small proportion of the more hazardous ingredients.

There is a safe exposure level for most substances. The more toxic the substance, the lower that level will be. Overexposure occurs when the safe exposure level is exceeded. When this happens, the substance can cause health problems. Your immune system and overall health can influence your tolerance of a substance.

Hazardous substances enter the body by skin absorption, inhalation or ingestion. The route for a particular substance depends on its physical characteristics and how it is normally used.

**Epoxy resins and hardeners**

The risk of exposure to resin, hardener and mixed epoxy is greatest when they are liquid. As epoxy cures, the chemical ingredients react to form a non-hazardous solid. As it solidifies, epoxy and its components are less likely to enter the body.

Skin contact is the most common means of exposure to resins and hardeners. Even minor skin contact, if repeated often enough, can cause chronic health problems. In rare cases, with prolonged or repeated contact, the skin can absorb harmful epoxy ingredients.

Exposure by inhaling vapors is unlikely, because epoxy products evaporate slowly. However, the risk increases when ventilation is inadequate or when the products are heated.

People rarely ingest epoxy, but it can happen when resin, hardener or mixed epoxy contaminate food, beverages or eating surfaces.

**Partially cured epoxy dust**

Sanding partially cured epoxy produces airborne dust, which increases your risk of exposure by skin contact, inhaling or ingesting. Although epoxy is firm enough to sand within two hours, it may not cure completely for up to two weeks. Until then, the dust can contain unreacted hazardous components. Do not overlook or underestimate this hazard.

Health effects from overexposure to epoxy

We have a long history of working with and around epoxies daily. As builders and epoxy formulators, we’ve had a much higher risk of exposure to epoxy than the average builder or casual epoxy user. Through our own experience, and the experience of other builders, we can estimate the likelihood of health problems from handling WEST SYSTEM resins and hardeners.

The following are the most common health problems stemming from epoxy use. Nearly all of us can prevent these problems. The majority of those who do develop a health problem can continue using epoxy with adequate precautions.

**Dermatitis**

Fewer than 10% of epoxy users react when overexposed to epoxy resin or hardener. The most common reaction is contact dermatitis, or skin inflammation. Both epoxy resin and hardener can cause acute contact dermatitis. Discomfort can be severe, but usually disappears after stopping contact with the irritant. Repeated skin contact with resins and hardeners may also cause chronic contact dermatitis, which is usually milder but longer lasting. If left untreated for long periods it can progress to eczema, a form of dermatitis that can include swelling, blisters and itching. Partially cured epoxy sanding dust, if allowed to settle on the skin, can also lead to contact dermatitis.

**Allergic Dermatitis (Sensitization)**

Allergic dermatitis is a more serious problem, but less than 2% of epoxy users are likely to get it. Allergic dermatitis is caused by the body hyperreacting to an allergen. Sensitization is the condition of being allergic to a substance. Your immune system and the degree and frequency of exposure to epoxy affects your chance of becoming sensitized. You are most susceptible if you have been grossly overexposed to epoxy, or if you are inherently sensitized or allergic to a component of epoxy. You are also more susceptible if you have fair skin, if you’ve already been exposed to other sensitizing substances, or if you have hay fever, other allergies or are under stress.

You may become sensitized to epoxy after many exposures or just one. It could take ten days of exposure, a month, or even years. It is best to avoid all exposure
because you cannot know ahead of time how much you can tolerate before you become allergic.

Allergic reactions to epoxy can result in irritated skin or respiratory problems. Irritated skin is by far the more common of the two. Usually, it appears much like a reaction to poison ivy and may include swelling, itching and red eyes. Just as with poison ivy, the irritation can be mild or severe, acute or chronic.

Inhaling concentrated epoxy vapors, if done frequently or for long periods, can irritate your respiratory tract. Exposing sensitive skin areas, like the eye lids, to highly concentrated epoxy vapors may cause itching and swelling.

See a physician if irritation persists or worsens after avoiding epoxy for several days. There is no specific antidote for epoxy sensitization, but symptoms can sometimes be treated with medicine.

Once sensitized, additional (and sometimes increasingly severe) reactions become likely upon future exposures, even to tiny amounts of epoxy. It is difficult, but not impossible to prevent recurrences. Resume epoxy use only after symptoms disappear, and strictly follow the recommended handling procedures to prevent exposure. Read the product’s Material Safety Data Sheets (MSDS) so you can identify symptoms and employ preventive and first aid measures.

Severe irritation and chemical burns

Hardener burns are uncommon. Mixed epoxy is unlikely to cause burns. By themselves, WEST SYSTEM epoxy hardeners are moderately corrosive. If left in contact with the skin, they can severely irritate it and cause moderate chemical burns. Chemical burns develop gradually, and first cause irritation and slight pain. The burn may discolor and slightly scar the skin. The time it takes for a hardener to cause a chemical burn depends on the area of contact and hardener concentration. When resin and hardener are mixed, the hardener is diluted and therefore less corrosive. Although mixed epoxy is less corrosive, never leave it on your skin. It cures rapidly and is difficult to remove.

Respiratory irritation

Breathing highly concentrated epoxy vapor can irritate the respiratory system and cause sensitization. At room temperature, epoxy vapors are unlikely to be highly concentrated. However, if you are already sensitized to epoxy, exposure to low concentrations of epoxy vapors can trigger an allergic reaction. At warmer temperatures and in unventilated spaces, the epoxy vapor levels increase.

Never breath the sanding dust of partially cured epoxy. Epoxy chemicals remain reactive until they have cured. Serious health problems can result from sanding epoxy before it is fully cured. When you inhale these dusts particles, they become trapped in the mucus lining of your respiratory system. The reactive material can cause severe respiratory irritation and/or respiratory allergies.

WEST SYSTEM fillers present few hazards by themselves. However, breathing any nuisance dust will worsen existing respiratory problems. Smokers and others whose lungs are under strain are far more likely to develop serious respiratory problems.

Preventing overexposure to epoxy

You can prevent health problems from the start by limiting your exposure to hazardous materials. This means more than using respirators, goggles and protective clothing.

General guidelines

While the following guidelines are meant for an industrial setting, they can be an important guide for casual epoxies users. Consider the following steps to protect yourself from epoxy or any hazardous product.

Step 1—Make informed decisions about the products you use. Use the least hazardous product that will do the job. Often you can find a product with minimal health hazards that is adequate or even superior for the job. This can reduce or eliminate the hazard source.

Step 2—Set up a safe shop. Install equipment or use procedures that prevent or reduce exposure. This can include ventilation or specialized storage for hazardous materials. Effective ventilation can range from expensive, high-tech air-filtration and exhaust systems to the basic floor or window fans, and is useful for a wide range of vapors and dusts. A dedicated cabinet or isolated area for storing hazardous materials can help reduce exposure.

Step 3—Wear protective equipment (goggles, safety glasses, gloves, respirators, protective clothing, etc.) appropriate for the job at hand. The recommended minimum for most epoxy users is gloves, eye protection and protective clothing. Protect yourself from epoxy vapors by using a respirator with an organic vapor cartridge. The approved respiratory protection against epoxy dust, wood dust and nuisance dusts is a dust/mist mask or respirator.
Limiting exposure to epoxy resins and hardeners

The government has not established exposure limits for WEST SYSTEM epoxy products. We recommend limiting exposure to the levels approved for the raw materials used in formulating the product, as shown in the product’s MSDS. Practice the following procedures for the safe use and handling of our epoxy products.

1. Avoid contact with resin, hardeners, mixed epoxy and sanding dust from partially cured epoxy. Wear protective gloves and clothing whenever you handle epoxies. Barrier skin creams provide added protection. If you do get resin, hardener or mixed epoxy on your skin, remove it as soon as possible. Resin is not water soluble—use a waterless skin cleanser to remove resin or mixed epoxy from your skin. Hardener is water soluble—wash with soap and warm water to remove hardener or sanding dust from your skin. Always wash thoroughly with soap and warm water after using epoxy, removing amine blush or sanding epoxy. If you spill epoxy on your clothes, change them immediately. Use skin cleanser to remove any epoxy from you and your clothes. If you cannot completely remove it from your clothes, do not continue to wear them. If it is mixed epoxy, you may wear the clothes again once the epoxy has completely cured. Never use solvents to remove epoxy from your skin.

Stop using the product if you develop a reaction. Resume work only after the symptoms disappear, usually after several days. When you resume work, improve your safety precautions to prevent exposure to epoxy, its vapors and sanding dust. If problems persist, discontinue use and consult a physician.

2. Protect your eyes from contact with resin, hardeners, mixed epoxy, and sanding dust by wearing appropriate eye protection. If epoxy gets in your eyes, immediately flush them with water under low pressure for 15 minutes. If discomfort persists, seek medical attention.

3. Avoid breathing concentrated vapors and sanding dust. All of our epoxies have a low volatile organic content (VOC), but vapors can build up in unvented spaces. Provide ample ventilation when working with epoxy in confined spaces, such as boat interiors. When you can’t adequately ventilate your work space, wear an approved respirator with an organic vapor cartridge.

Provide ventilation and wear a dust/mist mask or respirator when sanding epoxy, especially partially cured epoxy. Breathing partially cured epoxy dust increases your risk of sensitization. Although epoxy cures quickly to a sandable solid, it may take over two weeks at room temperature, or elevated-temperature post-curing, to cure completely.

4. Avoid ingesting epoxy. Wash thoroughly after handling epoxy, especially before eating or smoking. If you swallow epoxy, drink large quantities of water—DO NOT induce vomiting. Hardeners are corrosive and can cause additional harm if vomited. Call a physician immediately. Refer to First Aid procedures on the Material Safety Data Sheet.

5. Keep your workshop clean to avoid incidental contact. Avoid touching door handles, light switches and containers when you have epoxy residue on your gloves, because you may touch them later without gloves on. Clean up spills with a scraper, collecting as much material as possible. Follow up with absorbent towels. Use sand, clay or other inert absorbent material to contain large spills. DO NOT use saw dust or other fine cellulose materials to absorb hardeners. Clean resin or mixed epoxy residue with acetone, lacquer thinner or alcohol. Follow all safety warnings on solvent containers. Clean hardener residue with warm soapy water. You may reclaim uncontaminated resin or hardener for use. DO NOT dispose of hardener in trash containing saw dust or other fine cellulose materials—they can spontaneously combust.

6. Safely dispose of resin, hardener and empty containers. Puncture a corner of the can and drain residue into the appropriate new container of resin or hardener. Do not dispose of resin or hardener as liquids. Mix and cure waste resin and hardener (in small quantities) to make a non-hazardous inert solid. CAUTION! Pots of curing epoxy can get hot enough to ignite surrounding combustible materials and give off hazardous fumes. Place pots of mixed epoxy in a safe and ventilated area, away from workers and combustible materials. Dispose of the solid mass only after it has completely cured and cooled. Follow federal, state or local disposal regulations.

Other epoxy related hazards

Uncontrolled curing and burning of epoxy

The chemical reaction that cures mixed epoxy is exothermic, or heat generating. If left to cure in a contained mass, such as in a mixing pot, it can generate enough heat to melt plastic, burn your skin or ignite surrounding combustible materials. The larger or thicker the epoxy mass, the more heat generated. A 100-gram mass of mixed epoxy can reach 400°F.

To prevent heat buildup, transfer epoxy from the mixing pot to a roller pan or other wide, shallow container. Fill large cavities with epoxy in multiple layers rather than in a single, thick layer. Heat build up and uncontrolled curing are unlikely in typical bonding and coating jobs, because spreading the epoxy into thinner layers dissipates heat.

Mixed resin and hardener become hot and frothy as they thermally decompose, generating toxic vapors. These include carbon monoxide, oxides of nitrogen, ammonia,
and possibly some aldehydes. Cured epoxy can emit similar vapors if you heat it too much. This can happen when you use a flame to release epoxy-mounted hardware. To reduce this risk, use just enough heat to release the hardware. Only as a last resort should you use a flame to burn epoxy from hardware. If you must do so, work in a well-ventilated area.

While leftover mixed epoxy cures, set the container aside where you can monitor it. Use a fan to disperse vapors and direct them away. Air purifying respirators may not be effective against these vapors.

Spontaneous combustion is a danger when hardeners are mixed with sawdust, wood chips, or other cellulosic materials. When hardener is spilled onto or mixed with sawdust, the air and moisture react with the amine to generate heat. If the heat is not dissipated quickly enough, it can ignite the sawdust. Do not use sawdust or other cellulosic materials to absorb a hardener spill. Likewise, do not pour unused hardener into a trash can with sawdust or other cellulosic materials.

West SYSTEM epoxy resins and hardeners are classified non-flammable, because their flash points are greater than 200°F and they evaporate slowly. Furnaces, wood stoves, and other heat sources do not pose a serious fire hazard in the presence of epoxy vapors.

Spraying epoxy

We do not recommend spraying epoxy products because the health and safety risks are enormous. As epoxy leaves a spray gun nozzle, it is reduced to tiny droplets (spray mist). You can easily inhale epoxy that is suspended in the air. It can cause extensive lung damage and other health problems. The spray mist can settle on your skin, causing sensitization and allergic reactions. It can settle on your eyes, injuring them.

Compared to other application methods, spraying increases the amount of hazardous volatile components released from the epoxy. Using solvents to thin the epoxy for spraying adds to the health and safety risks. These hazards are similar to those of any spray painting operation, involving both health and flammability concerns.

If you are determined to spray epoxy, control hazardous vapor and spray mist by using isolation and enclosure, such as a properly designed, ventilated and filtered spray booth. In any case, if you spray epoxy, you must use an air-supplied respirator and full-body protective clothing!

Shop hazards

Solvents

Many solvents pose serious health and safety hazards, and the government is increasingly regulating worker exposure and overall usage. Epoxy users commonly use solvents to dissolve epoxy from tools and to degrease surfaces before bonding. Solvents’ ability to dissolve and degrease is part of why they are hazardous to your health. They leach oils from the skin and break down protective fatty layers. This makes skin more susceptible to dermatitis. While dermatitis is the most common skin problem solvents cause, it doesn’t stop there.

Once solvents have penetrated the protective skin layers, they may quickly find their way into the blood stream. You can absorb toxic amounts in this way. If you use solvent to clean epoxy from your skin, your skin can absorb both the solvent and the dissolved epoxy. This will intensify epoxy exposure.

Almost all solvents are toxic if you swallow, absorb or inhale enough. Solvents can irritate your respiratory system, eyes and skin. Some solvents may damage your heart, liver and other vital organs. Several solvents have been linked to cancer.

Repeatedly inhaling low to moderate levels of solvents can irritate the respiratory tract. Because of their drying effect, solvents can also interfere with the lungs’ natural ability to clean themselves of impurities. When inhaled in high concentrations, solvents may depress the central nervous system. This is called narcosis. Symptoms of overexposure range from nausea and irritability to something which resembles alcohol intoxication. Continued overexposure to particularly toxic solvents can lead to loss of consciousness, permanent brain damage and death.

Some solvents give off a strong odor when highly concentrated, while others do not. Even for those that do, you may not notice the odor after you are exposed to it for a few hours, or if you have a cold. If you notice a strong odor while using a solvent, vapors may already be too highly concentrated and you will need to ventilate more or use a supplied-air respirator. Many milder solvents are being developed to replace the more hazardous solvents. If the manufacturer of a solvent claims its product can be used on the skin, you should follow instructions carefully, and wash afterwards with warm, soapy water.
OSHA sets Permissible Exposure Limits (PELs) for chemicals, based on the amount or vapor level a worker can safely be exposed to in a given time period. The American Conference of Governmental Industrial Hygienists also sets exposure levels based on an 8-hour time-weighted average, called Threshold Limit Values or TLVs. These values are expressed in parts of contaminant per million parts of air. See the table below for examples of PELs for some commonly used industrial solvents.

**Preventing overexposure to solvents**

1. Always select the least toxic and least flammable solvent that will get the job done. Avoid solvents completely if at all possible.

2. Do not smoke or use equipment that may generate sparks near solvent vapors or solvent storage areas. Store solvents in tightly closed, approved containers. Store them a safe distance from any ignition source and out of children's reach.

3. Use solvents only in well ventilated areas. Bring fresh air into your shop and exhaust solvent laden air. In confined areas, wear the appropriate respiratory protection. If you can, set up a basic mechanical ventilation scheme for all projects calling for solvents.

4. Take special care in hot weather, when solvents evaporate quickly and are more likely to ignite.

5. Do not operate power machinery or climb ladders if you have been working with solvents in a confined area. If you feel drowsy, nauseated, “high” or irritable while using solvents, immediately move to an area of fresh air. First aid for unconsciousness resulting from overexposure to solvent vapors is fresh air.

**Solvent and dust fire hazards**

Most solvents are extremely flammable. By themselves, in paints, or other products, solvents cause many shop fires. The fire hazards that solvents pose may be their greatest threat, to both human health and property. You must follow basic shop safety rules whenever you use them. Research the flash points and evaporation rates, and use adequate ventilation. Remove all ignition sources. The table below lists some important comparative health and flammability information for solvents commonly used in the shop.

An explosion can happen when solvent vapors mix with high concentrations of fine dust particles suspended in the air. Even by itself, wood dust is explosive. The finer the dust particle, the greater the chance of explosion. Also, as temperatures increase, an explosion can happen at lower solvent vapor concentrations. One worker, hand sanding, could not raise enough dust to cause an explosion, but several people operating power sanding equipment could.

An open flame can set off an explosion, as can an accidental charge of static electricity or a spark from a combustion engine, light switch or power tool. Some fine powders and fillers can generate enough static electricity to ignite a flammable atmosphere. When handling large quantities of powdered material, keep airborne concentrations to a minimum and use grounding devices on transfer equipment.

**Common shop dusts**

Dust from partially cured epoxy can cause respiratory problems if inhaled, and dermatitis if allowed to settle on skin. Dust from fully cured epoxy is inert and considered a nuisance dust.

Dusts from woods commonly used with epoxy, such as cedar, redwood, mahogany and teak, can cause allergic skin and respiratory reactions. Wood saps and oils contain irritants. These allergens are reduced as lumber dries, so it is always better to work with seasoned wood.

Dusts from minerals, such as asbestos and crystalline (not amorphous) silica are dangerous because of their shape, which makes them difficult to expel from the lungs. This is also true of airborne glass, carbon and similar fibers.

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**Table of comparative flash points, evaporation rates, Lower Explosive Limits (LELs) and Permissible Exposure Levels (PELs).** Information from this chart was extracted from “Fire Protection Guide to Hazardous Materials,” NFPA, 10th edition, 1991.

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Flash Point(^1) (°F)</th>
<th>Evap. Rate (Butyl acetate = 1) (%)</th>
<th>LEL(^2) (%)</th>
<th>PEL(^3) (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>0 °F</td>
<td>7.7</td>
<td>2.8</td>
<td>750</td>
</tr>
<tr>
<td>Methylene chloride</td>
<td>Non-flammable</td>
<td>14.5</td>
<td>—</td>
<td>25</td>
</tr>
<tr>
<td>Methyl Ethyl Ketone (MEK)</td>
<td>16 °F</td>
<td>4.6</td>
<td>1.4</td>
<td>200</td>
</tr>
<tr>
<td>Toluene</td>
<td>40 °F</td>
<td>1.5</td>
<td>1.1</td>
<td>50</td>
</tr>
<tr>
<td>Turpentine</td>
<td>95 °F</td>
<td>.38</td>
<td>0.8</td>
<td>100</td>
</tr>
<tr>
<td>Xylene</td>
<td>81 °F</td>
<td>.75</td>
<td>1.1</td>
<td>100</td>
</tr>
</tbody>
</table>

\(^1\) Flash point is the lowest temperature at which flammable vapor is given off by a liquid in a test vessel in a sufficient concentration to be ignited in air when exposed momentarily to a source of ignition.

\(^2\) Lower explosive limit is the volume percentage of the vaporized solvent that makes an explosive mixture in air.

\(^3\) Permissible exposure limits were extracted from “Department of Public Health Air Contaminants Standard,” issued in 1990.
coming from cutting and handling glass tape or cloth, or from sanding or grinding a fiberglass composite. Use these materials only with adequate ventilation and appropriate respiratory protection, such as an approved particulate dust mask. For comfort and safety, avoid inhaling these dusts!

Preventing overexposure to dusts

The following sensible shop suggestions may help to reduce exposure to epoxy dusts, wood dusts and fillers.

1. Use personal protective equipment if you handle wood you suspect that you may be particularly sensitive to.

2. Sand only in shop areas with adequate ventilation. If dust levels in your shop are high, or if you are sanding in a confined space for a long time, wear an approved dust mask. If the entire shop is dusty, make sure everyone, not just the person sanding, wears a mask.

3. When you have a choice, use a cutting tool, a chisel or plane, rather than an abrading tool, a polisher or sandpaper. Wear safety glasses.

4. Use wet, rather than dry, sanding techniques on epoxy. When sanding fresh epoxy, wait for several days to ensure a complete cure. If you can’t wait to sand, wear protective clothing, eye wear and a dust mask.

5. If you must sweep your floor, wear a dust mask and use a sweeping compound. It is safer to vacuum or mop because less dust goes into the air.

6. Use dust collectors on major dust producing machinery.

7. Take steps to prevent fires. Store solvents safely and make rules about smoking. Dust, solvent vapors and an ignition source can make an explosive combination.

8. Prevent conditions that could create a static electrical charge. If handling large quantities of dust or filler, ground equipment properly.

9. When handling fillers, try to keep them from becoming airborne, where they can remain respirable for long periods.

Environmental concerns

Volatile emissions

Recent clean air regulations have added new requirements to reduce emissions of volatile organic compounds (VOCs) and other air pollutants. Because of these regulations and other environmental concerns, many customers are asking builders to use products that pollute less. The volatile emissions from our epoxies are much lower than that of conventional vinyl esters and polyesters used in the composites industry. While our epoxy doesn’t have one major or easily identifiable volatile component, emissions may include small amounts of benzyl alcohol, low-molecular weight amines or a reactive diluent.

To put it into perspective, making a laminate which requires 10 gallons of conventional vinyl ester resin would put 30 pounds of VOCs into the air. A laminate requiring the same quantity of WEST SYSTEM epoxy would emit only one-half pound of VOCs. Consider the environmental impact when choosing the products you will use on your projects.

Disposal of leftover resin and hardener

WEST SYSTEM epoxy resins and hardeners are not considered hazardous wastes in their purchased form, using the criteria outlined in the Resource Conservation and Recovery Act (RCRA). Some state and local regulations, and disposal facilities may require additional lab analysis or evaluation of a Material Safety Data Sheet (MSDS) to determine if your wastes satisfy their requirements. It is always the end user’s responsibility properly dispose of wastes.

The following guidelines should help you make the right decisions when it comes time to dispose of unused epoxy resin and hardener.

1. You do not have to designate unused resin and hardener as “waste” if you may use it on a future project. WEST SYSTEM epoxy products have a long shelf-life when stored in sealed containers. Simply use the product on another project.

2. You may dispose of cured epoxy (resin and hardener mixed at the proper ratio and completely solidified) as a non-hazardous solid.

3. Dispose of empty product containers only after you follow these simple “empty” rules: (1) You’ve made every effort to empty the container, and (2) no more than three percent by weight of the total capacity of the container remains in the container. Containers drain more completely when warm.

4. Keep waste to a minimum. Work with small batches of epoxy. When emptying a container for disposal, collect the residue for use on a future project.

5. Reclaim for further use epoxy resin or hardener collected from a spill or leak. If it is contaminated, designate it as waste. If you have used a solvent to clean up a spill, then the resultant mixture of solvent and epoxy may become a regulated hazardous waste.
Respect the environment. Don’t release hazardous wastes directly to the land, air or water. Many communities organize periodic waste collections where consumers can take household wastes for safe disposal, usually free of charge.

The disposal guidelines above may not comply with the laws and regulations in your area. If you are uncertain, refer to local, state and federal regulations. Also, this section has addressed only the disposal of our epoxy resin and hardener. Boat building and repair projects generate many hazardous wastes, including bottom paint, gel coat, paints and solvents. These materials can harm the environment, so identify and dispose of them properly.

**Summary**

In this guide, we have presented the health hazards of mishandling epoxies and related materials. In the course of a building or repair project, you may run a greater risk of harm falling from a ladder or misusing power tools. It’s self-defeating to worry a great deal about epoxies if you are careless about using your table saw.

Good health can help you avoid and overcome the problems described in this guide. Avoid stress, eat right and exercise to help reduce your susceptibility to these hazards.

Use common sense. The more informed you are about the products you use, the better off you’ll be. Master basic health and safety principles and take responsibility for seeing them through. Your shop or business will be a safe place and you’ll be able to continue working with WEST SYSTEM epoxy products for a long time.

When it comes to setting the rules and work practices of your shop, your health and safety are in your own hands.

All WEST SYSTEM technical manuals include basic safety information. All of our product labels provide appropriate hazard warnings. If you need more specific information, request MSDS through your distributor or West System Inc.

For additional information contact:

Safety Department
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P.O. Box 665
Bay City, MI 48707 USA
866-937-8797
www.westsystem.com

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When working with epoxy, always:

- **Read instructions**
- **Work clean**
- **Ventilate**
- **Cover up**

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