



Safety Concerns in the Autobody Shop

Preventing Injuries is Good Business!

A safe business is a more productive business. This certainly rings true in the field of automobile refinishing, an industry where workers are exposed to a multitude of physical and chemical hazards everyday. Highly trained and motivated people make the safety program work. In fact, sources of danger can be eliminated and hazards can be controlled through special training, safety devices, protective clothing, and equipment. In all shops, safety should be a condition of employment.

Protecting Yourself

Personal Protection in the Bodywork Area

Whether you're sanding, grinding, cutting, brazing, or welding the framework of a car, safe working practices should always be Priority # 1. Here are just a few tips to keep in mind when performing any of these tasks:

- Always wear goggles or face shields when grinding.
- Dust collectors and power exhausts should be provided on sanders/grinders that produce dust.
- Splash guards should be mounted on grinders that use coolants.
- Equip saws, belts, pulleys, and wheels with machine safety guards. Do not wear loose clothing or jewelry around these machines.

- Make sure that "DANGER—NO SMOKING, MATCHES, OR OPENLIGHTS" signs or the equivalent are posted in the welding area. Also make sure suitable fire extinguishing equipment is nearby.
- Use shields to confine heat, sparks, and slag when the object to be welded and/or fire hazards cannot be moved.
- Check for adequate ventilation where welding or cutting is performed.
- Know the hazards of welding gases, and know how to store and safely handle compressed gases.

Personal Protection in the Spray Painting Area

The hazards of working in the spray painting area are not to be taken casually. Painting can expose workers to solvents as well as metal-bearing pigments like lead and zinc chromates found in primers which can cause skin, eye, and respiratory irritation. Chromates have been linked to cancer. Over-exposure to solvents and lead also can result in nervous and reproductive system damage and liver and kidney disease. Another dangerous category of chemicals to be wary of are isocyanates. Found in urethanes, catalysts, hardeners, these too can cause skin problems as well as allergic and asthmatic reactions. What follows is an abbreviated checklist of safety precautions which should be taken when

applying spray paint materials onto automobiles:

- Read the label or other instructions first before you handle the material. Never use a container that does not have a label if you are uncertain of its contents. Never sniff vapors from a container to determine what is inside.
- Follow directions for storing and mixing the material. Use the product only in the recommended way.
- Provide adequate ventilation before starting any spraying operations. Wear a respirator which is an appropriate safeguard for the material(s) you are working with.
- Wear proper eye protection when spray painting. Make sure an eyewash station is easily accessible to your working location. Wear gloves, head and shoe protection, and a protective paintsuit to prevent paint from seeping onto your skin and clothing.
- Never eat, drink or smoke in a spray painting area.

Paint products also pose the danger of fire and explosion. With this added risk to be mindful of when working in the spray painting area,



it is equally important to know what steps to take in preventing a volatile situation from erupting:

- Never smoke or use spark-producing tools around paint products.
- Store scrap materials and oily rags in covered metal or other safety receptacles to minimize the risk of fire and spontaneous combustion.
- Do not handle oxygen cylinders with oily hands or gloves. Do not use oxygen to blow off your clothing as oxygen-saturated clothing will burn easily if touched by a spark.

General Safety Concerns in the Autobody Shop

Many of the Safety Concerns in the Automobile Refinishing Shop are just as applicable in any other industry sector. Although they may sound like common sense efforts, you may be surprised to learn how many of these preventative measures you may have overlooked in your own shop:

- Keep aisles and walkways clear.
- Make sure exit signs are clearly posted and that the exits themselves are kept free of obstructions.
- Post emergency telephone numbers where they can be readily found in case of an emergency.
- Make sure that your local fire department is well acquainted with your facility, its location and specific hazards. Follow all local fire regulations in order to prevent ignitable materials from catching fire.

- Keep paint spray booths and all other worksites clean and orderly.
- Ensure that all tools and equipment are in good working condition. Use lock-outs to prevent employees from attempting to use malfunctioning machinery.
- Use extreme care when working around electrical equipment. Make sure equipment is properly grounded. Know the hazards of working in damp or wet locations with electrical tools.
- Be aware of the level of noise in your working environment; use personal ear protection when necessary.
- Avoid hazards in the mixing area that can lead to chemical burns or explosions. Follow proper directions. Keep containers covered when not in use. Have a spill procedure plan implemented in all areas where chemicals are being used.
- Educate yourself in First Aid for your own protection as well as that of your co-worker(s).

The “Right To Know”

The Occupational Safety and Health Administration (OSHA) has issued the Hazard Communication Standard regulation (among other regulations) which states that you have the “Right to Know” what hazards you face on the job and how to protect yourself from them. Your employer has specific responsibilities to ensure a safe and healthy workplace for you. Examples of these include: Providing for the proper labeling of containers; access to Material Safety Data Sheets (MSDSs) and explaining what type of information is on

them; Providing protective equipment and training you in its use; Explaining safety methods and procedures, and; Enforcing safety rules.

You also have a responsibility to read the MSDSs and ask your employer about your workplace’s hazardous materials or situations, as well as wearing personal protective equipment and following procedures as instructed.

This “Plain English” fact sheet is provided solely as a guidance for understanding Safety Concerns in the Automobile Refinishing Industry. It does not constitute a comprehensive document and should not serve as a substitute for actual safety policy(ies). For information on receiving a free OSHA safety and health consultation, contact the RI Department of Health at (401) 222-2438. This service provides confidential, non-regulatory assistance, as well as recommendations for correcting hazardous situations.

