

Uniform Procedures For Collision Repair

HM01–Hazardous Materials

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v.2.3



1. Description

This procedure describes general guidelines for the proper handling, storing, and disposing of hazardous materials.



2. Purpose

The purpose of this procedure is to provide industry-accepted requirements for handling hazardous materials. This procedure is intended for use by professionals who are qualified through training and experience.



3. Referenced Documents

The following documents are considered part of this procedure by reference.

3.1 Procedures

PS01 Personnel Safety

3.2 Other Information

Canadian Centre for Occupational Health and Safety (CCOHS) rules

Equipment maker's safety and maintenance requirements

Emergency telephone numbers

Local or regional fire prevention codes

Material safety data sheets (MSDS)

National Electrical Code

National Fire Protection Association (NFPA) standards for fire

U.S. Occupational Safety and Health Administration (OSHA) rules

Product labels

Protection equipment for spray areas (NFPA 33)

Workplace evacuation procedures

Workplace safety program



4. Equipment And Material Requirements

4.1 Hazardous Waste Containers

Containers for temporarily storing hazardous waste include drums, tanks, or other containers suitable for the wastes generated. The containers must meet all applicable fire and safety codes.

4.2 Hazardous Materials Cabinets

Storage cabinets for hazardous materials must meet these specifications:

- attached ground straps
- located away from sunlight, excessive heat, or extremely wet or dry conditions
- doors that can be kept closed
- all federal and local requirements
- proper labels or signage
- located away from electrical fuse panels and boxes
- explosion proof
- located in a well-ventilated area



4.3 Fire Safety Equipment And Facilities

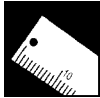
The following items contribute to a safe workplace and must meet federal and local requirements:

- hazardous material training for personnel
- automatic shutoff on equipment such as compressors, boilers, overhead doors, etc.
- automatic fire protection such as alarms, fire doors, and sprinkler systems
- approved fire extinguishers with ABC ratings
- readily available and accessible files of current MSDS
- inventory list and location (map or floor plan of facility) of stored materials

The following additional items are required in paint-mixing rooms:

- ventilation systems with proper air exchange rate
- explosion-proof electrical wiring, lighting, and motors
- automatic fire extinguishing system
- appropriate warning signs on doors
- containment curb or tray, in case of spills or leakage

Equipment and facilities must meet all required codes.



5. Damage Analysis

Does not apply.



6. Personnel Safety

6.1 General Safety

General safety information is in **PS01**.

6.2 Safety With Hazardous Materials

To protect yourself when handling hazardous materials:

- Read and understand the MSDS and container label for all products used. Make sure the MSDS is readily available in emergency situations as required by any applicable laws.
- Wear the proper safety clothing and equipment listed in the MSDS including acid-resistant clothing, proper respirator, skin protection, etc.
- Store paint and other **solvents** in grounded, closed containers. When pouring, keep the containers electrically bonded together.
- Know the location of emergency equipment and materials, such as fire extinguishers, spill absorbents, and emergency wash stations.
- Know and understand the workplace evacuation procedures and exits.
- Keep paint and other flammable products away from all sources of ignition, including heat, sparks, flames, motors, burners, heaters, pilot lights, and welding operations.
- Do not smoke when handling paint or other flammables.
- Be conscious of other workers who may be exposed by your actions.



Do not use material from an unlabeled container.

Do not smell, inhale, or come in contact with any unknown chemical.

Unknown and unlabeled materials should be treated as extremely hazardous, and disposed of as such.



7. Environmental Safety

7.1 Hazardous Materials

Hazardous materials include any of these categories:

- flammable materials
- corrosive materials
- reactive materials
- toxic materials
- volatile organic compounds (VOCs)

The chart on the following page lists examples of common hazardous materials.

Flammable materials have a low flash point, and must be kept away from heat sources and open flames.

Corrosive materials can damage metals, and cause severe burns to the skin.

Reactive materials become unstable, or undergo rapid or violent chemical reactions when heated or mixed with other materials.

Toxic materials are poisonous, and can cause illness, birth defects, or death.

VOCs contribute to the formation of ground-level smog. Atmospheric release of VOCs can be reduced by effectively using high-transfer spray equipment, enclosed gun cleaners, and low-VOC paint products. VOC content information is listed on product information sheets, product labels, and the MSDS. Follow the local record-keeping requirements for materials containing VOCs.

7.2 Hazardous Materials Storage

To safely store hazardous materials:

- Keep in an approved fireproof room or cabinet until they are ready to be used.
- Keep a list of the materials. The list should explain where the materials and MSDS are located and the amount of material stocked. Update this list regularly as required by applicable laws.
- Use secondary containment, if necessary.

(cont'd)



7. Environmental Safety (cont'd)

When a material is transferred to another container, label the new container as required by applicable laws. The workplace label must contain the following:

- the product name, as stated on the MSDS
- any hazardous warnings that were on the original label
- MSDS number, or reference that the MSDS is available

COMMON HAZARDOUS MATERIALS

Material	Flammable	Corrosive	Reactive	Toxic	Contains VOCs
Acids		X	X	X	
Adhesives	X			X	
Alkali		X	X	X	
Anti-corrosion Compounds				X	X
Antifreeze				X	
Battery Acid		X	X	X	
Brake Fluid				X	
Brush Cleaners	X			X	X
Butane	X			X	X
Chemical Paint Removers	X	X		X	
Cleaning Fluids		X		X	X
Epoxies	X			X	
Fiberglass Resin (Some)			X		
Gasoline	X			X	X
Lacquers	X			X	X
Magnesium			X		
Masking Materials	X				
Motor Oil				X	
Paint Materials/General				X	X
Power Steering And Transmission Fluid				X	X
Propane	X			X	X
R-12 With Open Flame			X	X	
Rubbing Compound				X	X
Solvents	X			X	X
Sound Deadener				X	
Spraybooth Filters	X				
Thinners And Reducers	X			X	X
Wax And Grease Removers	X			X	X

(cont'd)



7. Environmental Safety (cont'd)

7.3 Hazardous Material Spills

If there is a hazardous material spill:

- Identify the material.
- Follow the spill containment procedures as defined in the company spill response program. Refer to the MSDS for specific handling procedures.
- Report the spill immediately to local authorities.
- Eliminate flames or other sources of ignition.
- Ventilate the area.
- Materials used to clean up the spill, such as an absorbent, shop cloths, clothing, etc., must be disposed of as hazardous waste.
- Do not allow spilled materials to enter a drain that is not closed off to ground water or a water supply. If possible, place a dam between the drain and the spilled material. Further containment procedures, by emergency authorities, are necessary if the spilled materials enter a drain.

If the spill cannot be contained:

- Report the spill immediately to the local fire department or other authorities.
- Evacuate all personnel from the area.
- Have the material-specific MSDS available for cleanup personnel.

If a dry hazardous spill occurs:

- Use a HEPA-filtered vacuum to collect fine dust, such as dust from fiberglass and asbestos.
- If a vacuum is not available, lightly wet the dust with water and sweep it up.
- Do not use compressed air to blow the dust.
- Materials used to clean up the spill, such as vacuum bags and shop cloths, must be disposed of as hazardous waste.

7.4 Hazardous Waste Handling

All hazardous waste must be safely stored on site until it is disposed of permanently. Permanent disposal methods include:

- on-site treatment
- shipment to a commercial treatment, storage, or disposal facility
- shipment to a recycling facility

(cont'd)



7. Environmental Safety (cont'd)

With the possible exceptions of burning used oil as heating fuel, or recycling wash solvents (allowable in some locations), on-site treatment is not feasible for most collision repair facilities. The remaining options both involve shipping, either by a commercial hauler or the collision repair facility itself.

Any facility that ships hazardous waste must submit reports to the federal or regional environmental agency. Follow the agency's requirements.

Keep hazardous waste records for at least 3 years, including the following:

- manifests, or hauling record sheets
- required reports
- inspection reports
- land ban notices
- chemical test results, if any

In some cases, it may not be clear whether certain wastes are hazardous. To determine if wastes can be disposed of as non-hazardous material, a Toxic Characteristic Leaching Procedure (TCLP) should be performed by a licensed environmental laboratory. The TCLP is a one-time test that can determine whether these types of materials must be considered hazardous:

- dry paint
- dry spraybooth filters
- used masking materials
- used sandpaper
- used dust masks and respirator cartridges

The TCLP need not be repeated unless different paint materials are used.

To safely handle empty drums:

- Store separately from full drums.
- Cap and label "Empty."
- Send back to the supplier for reconditioning or to be sold for scrap.
- Do not sell to the general public.
- Do not dispose empty drums or containers in public or private landfills.
- Follow all federal and local regulations governing disposal.

(cont'd)



7. Environmental Safety (cont'd)

7.5 Hazardous Waste Storage

To safely store hazardous waste:

- Follow local or regional environmental rules.
- Label each container "Hazardous Waste." Labeling requirements will vary by area.
- List the date the wastes started to be collected in the container.
- Keep each container closed.
- Use non-corrosive containers for waterborne materials.
- Keep flammable waste away from heat and sunlight and in a well-ventilated area.
- If wastes are stored inside, provide the local fire department with a list of possible hazards.
- Protect containers from rain, snow, and standing water.
- Store hazardous materials on a concrete surface with the proper spill tray or containment curb.
- Replace any leaking containers immediately.
- Make sure there is enough room around the containers to allow for easy access.
- Inspect containers weekly. Document each inspection.
- Follow the limits for the quantities of hazardous waste that can be stored, and the maximum time the materials can be stored on site.
- Limit access to the storage area to authorized, trained personnel. Label the hazardous waste area for "Authorized Personnel Only."
- Follow local fire codes for inside storage.
- Keep a written record of the types of hazardous wastes that are stored on the property and the contents of each container.



Each type of hazardous waste must be stored separately.

Separate containers are required for these wastes:

- brake fluid
- engine and similar oils
- engine **coolant**
- solid waste, such as empty containers and spraybooth filters
- solvent-borne waste
- waterborne waste



(cont'd)



7. Environmental Safety (cont'd)

To safely store used lead-acid batteries:

- Store separately from other wastes.
- Store in a separate room on an asphalt or acid-resistant floor.
- Store in an area without a floor drain.
- Store a cracked or leaking battery in an acid-resistant container.
- Inspect batteries in storage weekly. Document each inspection.

A limited quantity of hazardous waste can be stored at or near the place where the waste was generated.

7.6 Hazardous Waste Disposal

Hazardous waste can be hauled by a commercial hauler, or by the collision repair facility itself. Commercial hauling is the method commonly used by collision repair facilities. When choosing a hazardous waste hauler:

- Ask for references from other businesses, trade associations, and environmental agencies.
- Ask for credentials, such as an identification number.
- Check expiration dates on proof of insurance and necessary permits.
- Confirm that all required licenses are current.

If a collision repair facility hauls its own waste:

- Follow local or federal regulations.
- Obtain a transporter identification number.
- Follow all packaging and labeling requirements.
- Notify the proper authorities if a spill occurs.
- Be financially responsible for the cleanup of any spill.



8. Vehicle Protection

Does not apply.



9. Repair Procedure

Does not apply.



10. Use Of Recycled (Salvage) Parts

Does not apply.



11. Inspection And Testing

11.1 Environmental Inspections

Periodic inspections should be performed to ensure that the following items currently meet all federal and local environmental requirements:

- hazardous materials storage
- hazardous wastes storage
- spill-containment equipment
- MSDS files
- building code compliance
- fire-prevention equipment
- paint usage records

Document the inspections.

11.2 Equipment Inspection And Maintenance

Follow the equipment maker's maintenance recommendations for the following equipment:

- spraybooths
- compressors
- paint mixing facilities
- spray gun cleaning equipment
- prep decks

Keep maintenance and inspection records.