OSHA CONSULTATION SERVICES

OSHA Compliance Assistance for the autobody/Repair shops

Office of Occupational Safety and Health

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Objective

- **Identify associated hazards**
- **OSHA Requirement/ Correction of the hazards**
- **OSHA Consultation Services**
Auto body and paint shop employees risk exposure to chemical and physical hazards everyday. Tasks including sanding, painting, and metal fabrication.
HAZARDS ASSOCIATED WITH AUTOBODY/REPAIR SHOP

2. Toxic and Hazardous Substance - Isocyanates, Methylene Chloride, Hexavalent Chromium, Lead etc.
2. General Environmental hazards - The control of hazardous energy (lockout/tagout)
3. Fire hazards - Portable fire extinguishers
4. Machinery and Machine Guarding - Abrasive wheel machinery
5. Electrical hazards - Wiring methods, components, and equipment for general use
**TOXIC AND HAZARDOUS SUBSTANCES**

- **Isocyanates**
  - Automotive clearcoats, body fillers, seam sealers
  - Potential human carcinogens, asthma, irritation of eyes, nose, throat and skin.

- **Methylene Chloride**
  - Paint-stripping, cleaning products
  - Potential occupational carcinogen, CNS, liver, adverse effects on the heart, skin or eye irritation
TOXIC AND HAZARDOUS SUBSTANCES

- **Hexavalent Chromium**
  - Procedure of sanding, grinding & welding
  - May cause lung cancer, irritation to nose, throat, lung; Skin and eye irritation.

- **Lead**
  - Autobody repair, sanding removes paints from surface
  - Harmful to lungs and Nervous system
HAZARD PREVENTION AND CONTROL

1. Engineering solutions
   Spray booth (1910.107) / local exhaust ventilation

2. Administrative controls
   Paints storage in a fire-resistant cabinet

3. Personal protective equipment (PPE)
OSHA REQUIREMENT

Respiratory protection program

- Procedures for selecting respirators for use,
- Medical evaluation,
- Fit testing,
- Training on the proper use, check the seals, storage and limitations of the respirator.
OSHA REQUIREMENT

HAZARD COMMUNICATION PROGRAM

- Labels and other forms of warning
- Safety data sheets (SDS)
- Employee information and training
HAZARD COMMUNICATION PROGRAM

- Lists of hazardous chemicals present at the worksite
- Availability of SDSs to employees and downstream employers
- Labeling of chemical containers
- Training programs regarding hazards of chemicals and protective measures
HAZARD COMMUNICATION LABELS

How the hazardous chemical is identified

Contact information of Responsible Party

Figure 5: Example of Required HCS Label Elements

Product Identifier

Pictogram *(Symbol in Red Frame)*

Signal Word *(Danger)*

Hazard Statement(s) *(Extremely flammable gas)*

Precautionary Statement(s) *(Keep away from heat and open flames. No smoking. Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Store in well-ventilated place.)*

Name, Address, and Telephone Number of Manufacturer, Importer, or Other Responsible Party
Safety Data Sheets (SDS)

SDS 16-section format:

Section 1: Identification
Section 2: Hazard(s) identification
Section 3: Composition/information on ingredients
Section 4: First-aid measures
Section 5: Fire-fighting measures
Section 6: Accidental release measures
Section 7: Handling and storage
Section 8: Exposure control/personal protection
Safety Data Sheets (SDS)

Section 9: Physical and chemical properties
Section 10: Stability and reactivity
Section 11: Toxicological information
Section 12: Ecological information
Section 13: Disposal considerations
Section 14: Transport information
Section 15: Regulatory information
Section 16: Other information
<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Flame</th>
<th>Exclamation Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Carcinogen</td>
<td>• Flammables</td>
<td>• Irritant (skin and eye)</td>
</tr>
<tr>
<td>• Mutagenicity</td>
<td>• Pyrophorics</td>
<td>• Skin Sensitizer</td>
</tr>
<tr>
<td>• Reproductive Toxicity</td>
<td>• Self-Heating</td>
<td>• Acute Toxicity (harmful)</td>
</tr>
<tr>
<td>• Respiratory Sensitizer</td>
<td>• Emits Flammable Gas</td>
<td>• Narcotic Effects</td>
</tr>
<tr>
<td>• Target Organ Toxicity</td>
<td>• Self-Reactives</td>
<td>• Respiratory Tract Irritant</td>
</tr>
<tr>
<td>• Aspiration Toxicity</td>
<td>• Organic Peroxides</td>
<td>• Hazardous to Ozone Layer (Non-Mandatory)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gas Cylinder</th>
<th>Corrosion</th>
<th>Exploding Bomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Gases Under Pressure</td>
<td>• Skin Corrosion/ Burns</td>
<td>• Explosives</td>
</tr>
<tr>
<td></td>
<td>• Eye Damage</td>
<td>• Self-Reactives</td>
</tr>
<tr>
<td></td>
<td>• Corrosive to Metals</td>
<td>• Organic Peroxides</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flame Over Circle</th>
<th>Environment</th>
<th>Skull and Crossbones</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Oxidizers</td>
<td>• Aquatic Toxicity</td>
<td>• Acute Toxicity (fatal or toxic)</td>
</tr>
</tbody>
</table>
The most cited standard would be:

2. Hazard communication (1910.1200)
3. Spray finishing using flammable and combustible materials (1910.107)
4. Powered industrial trucks (1910.178)
5. Flammable and combustible liquids (1910.106)
OSHA CONSULTATION SERVICES

- Reduce Worker injury and illness rates
- Decrease workers’ compensation costs
- Increase productivity
- Recognizing & removing hazards from workplaces
- Improving safety and health management systems