OSHA CONSULTATION SERVICES

OSHA Compliance Assistance for the autobody/ Repair shops

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AUTOBODY/ REPAIR SHOP

Objective

- **Identify associated hazards**
- **OSHA Requirement/ Correction of the hazards**
- **OSHA Consultation Services**

AUTOBODY/ AUTO REPAIR SHOP

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

1. **Hazardous Materials -** Flammable & combustible materials
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 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

Pictogram

Figure 3: HazCom 2012 Pictograms

Health Hazard  • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity	**Flame**  • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides	**Exclamation Mark**  • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory)
Gas Cylinder  • Gases Under Pressure	**Corrosion**  • Skin Corrosion/ Burns • Eye Damage • Corrosive to Metals	**Exploding Bomb**  • Explosives • Self-Reactives • Organic Peroxides
Flame Over Circle  • Oxidizers	**Environment** **(Non-Mandatory)**  • Aquatic Toxicity	**Skull and Crossbones**  • Acute Toxicity (fatal or toxic)

OSHA STANDARDS

The most cited standard would be:

1. **Respiratory protection (29 CFR 1910.134)**
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