

## JSA – JOB SAFETY ANALYSES

List of Job Safety Analyses (JSAs) covering various tasks and activities:

1. Methanol Decanting:
  - Task: Decanting methanol from one container to another.
  - Hazards: Inhalation exposure, flammability, chemical spills.
  - Safety Measures: Use appropriate PPE, work in a well-ventilated area, use approved containers, label containers properly, and handle with care.
2. Lifting and Manual Handling:
  - Task: Lifting and moving heavy objects manually.
  - Hazards: Musculoskeletal injuries, strains, and slips.
  - Safety Measures: Assess the load, use correct lifting techniques, seek help for heavy objects, use mechanical aids when necessary, and maintain good posture.
3. ISPS (International Ship and Port Facility Security):
  - Task: Implementing security measures in compliance with ISPS Code.
  - Hazards: Unauthorized access, security breaches, suspicious activities.
  - Safety Measures: Access control, identification checks, reporting procedures, and emergency response plan.
4. Working at Height:
  - Task: Performing tasks at elevated positions.
  - Hazards: Falls, falling objects, improper use of fall protection.
  - Safety Measures: Secure the area, use appropriate fall protection equipment, conduct a pre-work assessment, have a rescue plan, and follow proper working-at-height protocols.
5. Decanting Waste Chemicals:
  - Task: Transferring waste chemicals from one container to another for disposal.
  - Hazards: Chemical exposure, spills, incompatible chemicals.
  - Safety Measures: Use suitable PPE, work in a designated area, follow waste segregation guidelines, use approved containers, and have spill response measures.
6. Welding:
  - Task: Performing welding operations.
  - Hazards: Arc flashes, sparks, fumes, fire hazards.
  - Safety Measures: Wear appropriate protective gear, inspect welding equipment, have fire extinguishing equipment nearby, and follow proper welding techniques.
7. Gas Welding and Gas Cutting:
  - Task: Conducting gas welding and cutting operations.
  - Hazards: Gas leaks, burns, eye injuries, fumes.
  - Safety Measures: Use appropriate PPE, inspect equipment, ensure proper ventilation, follow correct techniques, and store gas cylinders safely.
8. Arc Welding and Cutting
  - Task: Carrying out arc welding and cutting processes.

- Hazards: Electric shock, burns, eye injuries, fumes.
- Safety Measures: Wear suitable PPE, inspect equipment, ensure proper grounding, follow correct techniques, and store electrodes safely.

9. Confined Space Entry:

- Task: Entering and working in confined spaces.
- Hazards: Limited entry/exit, toxic atmospheres, entrapment.
- Safety Measures: Conduct a risk assessment, use gas monitoring equipment, have a confined space entry permit, employ a trained standby person, and follow confined space protocols.

10. Ventilation and Protection in Welding, Cutting, and Heating:

- Task: Ensuring proper ventilation and protection during welding, cutting, and heating operations.
- Hazards: Inhalation of fumes, gases, and radiation; fire hazards.
- Safety Measures: Ensure proper ventilation in the work area, wear appropriate PPE, use local exhaust ventilation systems, follow safe techniques, and implement fire prevention measures.