

Synthetic amorphous silica insulation

Explain dangers

Synthetic amorphous silica insulation (SASI) is a thermal insulating material used in some building and manufacturing applications.

SASI blankets are often used as an insulating material to cover pipes.

The dust produced from handling or cutting this material can cause the following health effects:

- Skin dryness
- Irritation of the eyes, skin, and respiratory tract

Identify controls

HOW TO PREVENT EXPOSURE

Use the following precautions when handling or cutting SASI blankets:

- Keep the SASI blanket sealed and unopened until it is ready for use.
- Use yellow tape to cordon off the work area and post warning signs that personal protective equipment (PPE) must be worn in the work area.
- Wear all PPE recommended by the manufacturer.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection

- Full-facemask air-purifying respirator equipped with a P100 filter

Eye protection

- Goggles or equivalent

Clothing

- Impermeable disposable coveralls that are tight-fitting at the wrists, ankles, and face (i.e., it must have a hood)

Hand protection

- Impermeable gloves with cuffs overlapped and taped at the wrists
- If cutting, use cut-resistant gloves with impermeable gloves underneath

CUTTING APPLICATIONS

- Use hand tools to cut blankets whenever possible. Power tools create more dust.
- If power tools are used, make sure they are equipped with a HEPA filter. Otherwise, use a local exhaust ventilation system to capture dust at the source.
- Use designated cutting areas or cutting shacks for high-volume cutting.
- For prolonged periods of cutting, make sure the work area is fully enclosed. The enclosure should have installed a mechanical ventilation system equipped with a HEPA filter to keep the work area under negative pressure.

CLEAN-UP AND DISPOSAL

- Dispose of SASI waste in plastic bags upon removal.
- After exiting the insulation work area, put all disposable PPE in sealed bags and place the bags in designated containers.
- Use a HEPA vacuum to clean any PPE or clothing that may not be disposable.
- Once the job is complete, use a HEPA vacuum to clean the work area. Do not use dry sweeping methods or compressed air to clean up under any circumstances.
- Wash your hands and face with soap and water before breaks, before eating, and at the end of the work shift.

Demonstrate

With your crew, review the safety data sheet (SDS) for the SASI product used at your workplace.

Emphasize the following information:

- Health effects
- Precautionary measures
- First aid
- Disposal
- Control measures