

TOOL BOX TALKS

Hot Asphalt Roofing

According to the Centers for Disease Control, there are approximately 46,000 roofing contractors in the United States. Additionally, 11% of all asphalt produced is used in the roofing industry. Asphalt is produced in petroleum refineries and can be a residue left over after processing crude oil or petroleum. This document focuses on the occupational exposure to asphalt and asphalt fumes when roofing.

WORKSAFE TIPS

EXPOSURES

- Burns from fire
- Burns from contact with hot liquid (asphalt)
- Slip and fall into hot asphalt
- Inhalation of hot asphalt fumes

SIGNS OF OVEREXPOSURE

- Headache
- Fatigue
- Nausea
- Drowsiness
- Skin, throat and nose irritation

FIRST AID

- When exposed to hot asphalt liquid quickly remove excess asphalt, remove contaminated clothing and flush with water immediately
- Hot asphalt will severely burn skin
- Remove victim to fresh air if excess fume inhalation is suspected
- If victim becomes overheated, place them in shaded area, remove excess clothing, give small sips of water and fan
- Seek medical attention

PERSONAL PROTECTIVE EQUIPMENT

- Hard hat
- Eye protection (full face shield for kettle operators)
- Respirator when fumes are over OSHA P.E.L.
- Cotton shirt with long sleeves
- Leather, heat-resistant gloves
- Long pants, no cuffs
- Quality boots with protective toe

PERSONAL HYGIENE

- Wash hands before eating /leaving the jobsite
- Use soap and safe cleaners—never use gasoline
- Eat lunch away from asphalt fumes, upwind
- Shower as soon as possible
- Launder clothing before next use
- Separate work clothing from family laundry
- Change clothing before going home to keep contaminants from your vehicle and home

BEST PRACTICES

- Follow kettle manufacturer guidelines
- Notify building occupants of hot asphalt work
- Park kettles downwind—limit exposure to fumes
- Stage kettle away from building air handlers, air intakes, doors or windows
- Avoid staging kettle near pedestrian travel
- Keep lids on kettle to reduce fume emissions
- Report kettle maintenance or safety concerns
- Keep ABC rated fire extinguishers available on the roof and near the kettle
- Inspect the kettle pipe before flowing asphalt
- Park kettle on firm, level ground and chock tires
- Place barriers to protect pedestrians
- Reduce the frequency the kettle lid is opened
- Know equiviscous temperature and flash point of the asphalt (found on bill of lading or keg)
- Work with rooftop to adjust asphalt temps
- Never heat asphalt over the flashpoint
- Stay out of the fume cloud whenever possible
- Use a fan to reduce exposure to fume cloud
- Avoid injury —twist mops and buckets to unstick them from roof
- Minimize time spent on knees. Get as far away from the hot asphalt as possible—use long-handle tools



These advisory materials have been developed from national standards and sources believed to be reliable, however, no guarantee is made as to the sufficiency of the information contained in the material and Missouri Employers Mutual Insurance Company assumes no liability for its use. Advice about specific situations should be obtained from a safety professional.

888.499.SAFE (7233)