

Protecting Workers from Combustible Dust Explosion Hazards

Combustible dusts can fuel a flash fire or explosion when dispersed in a dust cloud. Workers in many industries who handle combustible solids may be exposed to combustible dust incidents that can cause catastrophic destruction, injuries and deaths. Employers and workers should take the steps below to control the fuel and prevent tragic consequences.

Control the Fuel (Dust) and Avoid Incidents

- **Capture** dust before it escapes into a work area by using properly designed, installed, approved and maintained dust collection systems.
- **Contain** dust within equipment, systems or rooms that are built and operated to safely handle combustible dust.
- **Clean** work areas, overhead surfaces and concealed spaces frequently and thoroughly using safe housekeeping methods to remove combustible dusts not captured or contained.

Key Responsibilities to Keep Workers Safe

Employers should determine whether dusts present in the workplace are explosible. If so, they must take proper precautions to protect workers against flash fires and explosions. Resources to help employers can be found at www.osha.gov/dsg/combustibledust.

Workers must be protected from combustible dust flash fire and explosion hazards. Supervisors should be notified if proper precautions have not been taken to protect workers from combustible dust hazards.



Source: OSHA

Examples of Potential Combustible Dust Materials

Agricultural cellulose corn egg white fertilizer flour powdered milk soy flour spices starch sugar tobacco wood flour	Carbonaceous charcoal coal lampblack lignite Metals aluminum iron magnesium titanium zirconium	Plastic epoxy resin melamine phenolic resin polyethylene polypropylene Other biosolids dyes pharmaceuticals rubber soap sulfur
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Some Dusts are Not Combustible

Certain materials in their pure chemical state will not form combustible dust, including cement, gypsum, limestone, sand and salt.