

Combustible Dust

Does your company or firm process any of these products or materials in powdered form?

If your company or firm processes any of these products or materials, there is potential for a "Combustible Dust" explosion.

<p>Agricultural Products</p> <p>Eggwhite</p> <p>Milk, powdered</p> <p>Milk, nonfat, dry</p> <p>Soyflour</p> <p>Starch, corn</p> <p>Starch, rice</p> <p>Starch, wheat</p> <p>Sugar</p> <p>Sugar, milk</p> <p>Sugar, beet</p> <p>Tapioca</p> <p>Whey</p> <p>Wood flour</p> <p>Agricultural Dusts</p> <p>Alfalfa</p> <p>Apple</p> <p>Beetroot</p> <p>Carrageen</p> <p>Carrot</p> <p>Cocoa beandust</p> <p>Cocoa powder</p> <p>Coconut shell dust</p> <p>Coffeedust</p> <p>Cornmeal</p> <p>Cornstarch</p> <p>Cotton</p>	<p>Cottonseed</p> <p>Garlic powder</p> <p>Gluten</p> <p>Grassdust</p> <p>Green coffee</p> <p>Hops (maltd)</p> <p>Lemon peeldust</p> <p>Lemon pulp</p> <p>Linseed</p> <p>Locust beangum</p> <p>Malt</p> <p>Oatflour</p> <p>Oatgraindust</p> <p>Olive pellets</p> <p>Onion powder</p> <p>Parsley (dehydrated)</p> <p>Peach</p> <p>Peanut meal and skins</p> <p>Peat</p> <p>Potato</p> <p>Potato flour</p> <p>Potato starch</p> <p>Raw yucca seed dust</p> <p>Ricedust</p> <p>Rice flour</p> <p>Rice starch</p> <p>Rye flour</p> <p>Semolina</p>	<p>Soybean dust</p> <p>Spicedust</p> <p>Spice powder</p> <p>Sugar (10x)</p> <p>Sunflower</p> <p>Sunflower seed dust</p> <p>Tea</p> <p>Tobacco blend</p> <p>Tomato</p> <p>Walnut dust</p> <p>Wheat flour</p> <p>Wheat grain dust</p> <p>Wheat starch</p> <p>Xanthangum</p> <p>Carbonaceous Dusts</p> <p>Charcoal, activated</p> <p>Charcoal, wood</p> <p>Coal, bituminous</p> <p>Coke, petroleum</p> <p>Lampblack</p> <p>Lignite</p> <p>Peat, 22% H₂O</p> <p>Soot, pine</p> <p>Cellulose</p> <p>Cellulose pulp</p> <p>Cork</p> <p>Corn</p>	<p>Chemical Dusts</p> <p>Adipic acid</p> <p>Anthraquinone</p> <p>Ascorbic acid</p> <p>Calcium acetate</p> <p>Calcium stearate</p> <p>Carboxy-methylcellulose</p> <p>Dextrin</p> <p>Lactose</p> <p>Lead stearate</p> <p>Methyl-cellulose</p> <p>Paraformaldehyde</p> <p>Sodium ascorbate</p> <p>Sodium stearate</p> <p>Sulfur</p> <p>Metal Dusts</p> <p>Aluminum</p> <p>Bronze</p> <p>Iron carbonyl</p> <p>Magnesium</p> <p>Zinc</p> <p>Plastic Dusts</p> <p>(poly)Acrylamide</p> <p>(poly)Acrylonitrile</p> <p>(poly)Ethylene (low-pressure process)</p>	<p>Epoxy resin</p> <p>Melamine resin</p> <p>Melamine, molded</p> <p>(phenol-cellulose)</p> <p>Calcium acetate</p> <p>(wood flour and mineral filled phenol-formaldehyde)</p> <p>(poly)Methylacrylate</p> <p>(poly)Methylacrylate, emulsion polymer</p> <p>Phenolic resin</p> <p>(poly)Propylene</p> <p>Terpene-phenol resin</p> <p>Urea-formaldehyde cellulose, molded</p> <p>(poly)Vinyl acetate ethylene copolymer</p> <p>(poly)Vinyl alcohol</p> <p>(poly)Vinyl butyral</p> <p>(poly)Vinyl chloride ethylene/vinyl acetylene suspension copolymer</p> <p>(poly)Vinyl chloride vinyl acetylene emulsion copolymer dust</p>
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Dust Control Measures

The dust-containing systems (ducts and dust collectors) are designed in a manner (i.e., no leaking) that fugitive dusts are not allowed to accumulate in the work area.

The facility has a housekeeping program with regular cleaning frequencies established for floors and horizontal surfaces, such as ducts, pipes, hoods, ledges and beams, to minimize dust accumulations within operating areas of the facility.

The working surface areas are designed in a manner to minimize dust accumulation and facilitate cleaning.

Ignition Control Measures

Electrically-powered cleaning devices such as vacuum cleaners and electrical equipment are approved for the hazard classification for Class II locations.

The facility has an ignition control program, such as grounding and bonding and other methods for dissipating any electrostatic charges that could be generated while transporting the dust through the duct work.

The facility has a Hot Work permit program

Areas where smoking is prohibited are posted with "No Smoking" signs
Duct systems, dust collectors and dust producing machinery are bonded and grounded to minimize accumulation of static electrical charges.

The facility selects and uses industrial trucks that are approved for the combustible dust locations.

Preventions and Measures

The facility has a separator device to remove foreign materials capable of igniting combustible dusts.

MSDSs for the chemicals which could become combustible dust under normal operations are available to employees.

Employees are trained on the explosion hazards of combustible dusts.

Protection Measures

The facility has an emergency action plan.

Dust collectors are located inside of the building (Some exceptions)
Rooms, building or other enclosures (dust collectors) have explosion relief venting distributed over the exterior wall of builds and enclosures.

Explosion venting is directed to a safe location away from employees.
The facility has isolation devised to prevent deflagration propagations between pieces of equipment connected by duct work.

The dust collector systems have a spark detection and explosion deflagration suppression systems
Emergency exit routes are maintained properly.

