

Dust Explosions Infographic



TYPES OF COMBUSTIBLE DUST



Agricultural Products

Sugars, Starches, Milks, etc.



Agricultural Dusts

Flours, Hops, Gluten, Cotton, etc.



Carbonaceous Dusts

Charcoal, Cellulose, Corn, etc.



Chemical Dusts

Lactose, Sulfur, Calcium, Acetate, etc.



Metal Dusts

Aluminum, Zinc, Bronze, etc.



Plastic Dusts

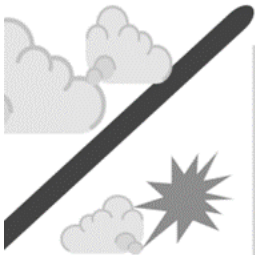
Epoxy Resin, Poly Ethylene, etc.

DID YOU KNOW?

Grain dust is 9 times more combustible than coal dust!



FUGITIVE DUST & SECONDARY EXPLOSIONS



Fugitive dust is dust that is created and accumulated within a facility. It often becomes trapped in unnoticeable places such as overhead beams and above ceilings.

During a primary explosion, fugitive dust can ignite and produce secondary explosions

It is oftentimes the secondary explosion that is the most destructive.



FAMOUS CASES



Giacomelli Bakery Explosion, 1st recorded dust explosion
2 injuries

1785

Washburn A Grain Mill Explosion
18 deaths

1878

Westwego Grain Explosion
36 deaths

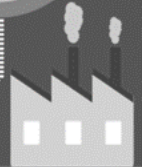
1977

West Pharmaceuticals Fire (Plastics)
6 deaths

2003

2008

Imperial Sugar Explosion
14 deaths



Source: <https://www.tuvsud.com/en>