

SAFETY & HEALTH AWARENESS SHEET

PHOTOGRAPHIC DUST EFFECTS

INTRODUCTION

A wide variety of products are used to create photographic dust effects in motion picture and television production. This awareness sheet has been developed to inform and assist productions when using these products. It is important that productions fully understand the possible effects of exposure, especially if potentially harmful ingredients are present.

PRODUCT INFORMATION

The following information is based on information obtained from product manufacturers, U.S. Geological Surveys and the U.S. Bureau of Mines.

MINERAL PRODUCTS

"Fuller's Earth" is the most common "product" used for photographic dust effects in the film industry. Unfortunately, the contents can vary widely from different suppliers. The term "Fuller's Earth" has neither a compositional nor a mineralogical connotation but is usually understood to be a non-plastic variety of kaolin (clay) containing aluminum magnesium silicate. It is sometimes synonymous with montmorillonite, kaolin, kaolinite, floridin, bentonite, wilkonite and halloysite. These products and others (e.g., pyrophyllite, pyrolite and diatomaceous earth) are all used to create photographic dust effects.

ORGANIC PRODUCTS

Photographic dust effects are also created by the use of organic products. Some of the more common organic products include wheat flour, rice flour, corn starch, coffee creamers and crushed nutshells.

Individuals with allergies to these products should use caution and avoid exposure.

POTENTIAL HEALTH EFFECTS

- Common effects of exposure are eye irritation, respiratory irritation, and skin irritation (*i.e.*, contact dermatitis).
- Anyone with allergies, asthma or other respiratory illnesses or limitations should take appropriate precautions.
- Burns as a result of ignition and flashing.

ACTIONS

The following are some actions you can take to minimize potentially harmful or dangerous exposures:

1. Prior to using any materials for photographic dust effects:
 - Know the products that you are using as well as the location and conditions under which they will be used.
 - Obtain a current Manufacturer's Material Safety Data Sheet (MSDS) for the specific product you are using.
 - Avoid products that contain known carcinogens.
 - Inform all cast and crew about the products being used, the necessary precautions that should be taken, and the products' potential effects.

2. To minimize potential exposures:
 - Remove unnecessary personnel.
 - Use only enough products to create the effect needed.
 - If indoors, periodically ventilate the area.
 - Use proper Personal Protective Equipment (PPE) as necessary.
3. Other Safety Considerations:
 - Any combustible material which, in a finely powdered form, is suspended in the air in sufficient quantity has the potential to flash or explode. Therefore, be aware of static electricity, which can cause dust products to flash, when transferring dust products from containers.
 - Be aware of elevated airborne concentrations during clean-up procedures. Elevated airborne concentrations increase the potential for exposure and flashing.
 - If the product is combustible, do not use around open flames or other potential sources of ignition (e.g., set lighting devices).
 - Industrial hygiene monitoring may be necessary to determine the airborne concentration, lower explosion levels, and/or particulate size during use.

REGULATIONS

Refer to Federal and Cal OSHA Regulations for further information and/or requirements. (Many products have Permissible Exposure Limits (PEL) established by Federal and Cal OSHA.)

SUMMARY

There are many different products available to create photographic dust effects. You need to understand the specific product being used. Each has its own unique properties and potentially adverse effects.

When choosing a dust product, you should refer to the MSDS and ask yourself the following questions:

1. Are you or any member of the cast or crew asthmatic, allergic or have other medical conditions that would be affected by exposure to the product?
2. Is the product combustible; and will it be used on an interior set or location?
3. Does the concentration of the product that will be used have a "Permissible Exposure Limit" that will require an Industrial Hygienist to monitor exposure?

When using products to create photographic dust effects, you must take all appropriate safety precautions.

FURTHER ASSISTANCE

If you have further questions, contact:

- Studio or Production Safety
- Manufacturer / distributor
- AMPTP/CSATF
- Supervisor
- Business Agent/Union Office