

Can I burn sulfur for pest control?

Sulfur is burned or vaporized to control fungus, mites, or insects. When sulfur is burned, it turns into a gas called sulfur dioxide. The gas can mix with moisture on plants to form an acid that can damage plant leaves. Breathing the gas can be harmful to human health.

What about burning or vaporizing sulfur in a greenhouse?

There are currently no sulfur products registered with the EPA that can be burned for plant protection. Pesticide products registered with the EPA have been tested for risks to people. **Labels** of registered products are written based on tests that instruct how much of a product to use, how to ventilate, and whether you must wear a respirator, gloves, or other safety equipment.

Even though elemental sulfur and vaporization tools can be purchased online and in stores, the EPA has not tested them for risks when used for **pest control** indoors or in greenhouses.



Always follow the label. There are no EPA-approved sulfur products for use in plant fumigation. There are unknown risks with using an unevaluated product.

Can burning sulfur make me sick?

If you can smell the gas, then you are breathing air that contains sulfur dioxide. You may be able to taste the gas before you can smell it. If you are working hard and breathing heavily, exposure to sulfur dioxide may be higher because you are bringing more air into your lungs. A person might be exposed if he or she is not wearing the correct respirator. Other effects to consider:

- Inhaling the gas from burning sulfur can cause coughing, sore throat, shortness of breath, and sinus problems.
- Eyes may become irritated, red, or painful and eye damage may be irreversible.
- Handling or touching sulfur without gloves may cause skin irritation.
- People with asthma or other respiratory problems may be more sensitive.
- Symptoms may not show up until a few hours after exposure.

If someone has been exposed, contact a Poison Control Center at 800-222-1222. To **report an incident**, call NPIC.

What are some ways to reduce risk?

- Use a pesticide that is registered with the EPA. All EPA labels come with safety precautions and directions for how to use the product. Using unregistered products for pest control may be a violation of **FIFRA** or **state pesticide regulations**.
- Avoid breathing in sulfur dust and gas from burned sulfur (sulfur dioxide).
- Consult a professional about **respirators**. Not all cartridges are the same and some will not protect you from sulfur dioxide.
- Wear gloves, goggles, boots, long sleeves, and pants.
- Sulfur and sulfur dust clouds are flammable. Be aware of ignition sources.
- Do not enter an area if sulfur is burning and use signs on all entrances to alert others.
- Close doors and turn off exhaust vents to avoid exposing anyone nearby during treatment.
- Fully ventilate the area before going inside, which may take several hours. Sulfur dioxide is heavier than air; active ventilation with fans or other automated systems may be needed.
- Ventilation may expose people near the treated area. Alert others nearby to avoid exposure.

This page should be used for informational purposes only. If you have questions, consider calling us at 800-858-7378 (8:00am-12:00pm PT), or email us at npic@ace.orst.edu. The National Pesticide Information Center does not regulate, distribute, or manufacture any pesticide products. Contact the **Occupational Health and Safety Administration** (OSHA) to discuss worker health and safety concerns.

References

International Chemical Safety Card (ICSC) for Sulfur Dioxide – The National Institute for Occupational Safety and Health (NIOSH)

Sulfur Dioxide Acute Exposure Guideline Levels - National Research Council Committee on Acute Exposure Guideline Levels

Reregistration Eligibility Decision: Inorganic Sulfites (2007) – US Environmental Protection Agency (EPA)

Sulfur Dioxide Technical Evaluation Report (2011) – USDA Agricultural Marketing Service