

## The experiment with fire



If glycerine is added to potassium permanganate, it ignites spontaneously after a while. Numerous biblical passages with fire can be illustrated with this.

### Material:

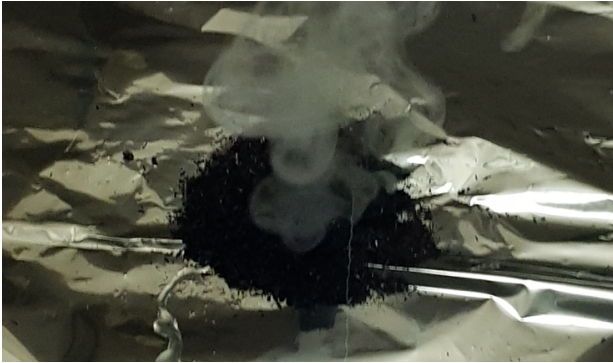
- Potassium permanganate  $\text{KMnO}_4$  (if possible, grind well with a mortar beforehand)
- Glycerine  $\text{C}_3\text{H}_8\text{O}_3$  (at least 99 %)
- Refractory base
- Mortar (if possible)

### Experiment:

About a tablespoonful of potassium permanganate is placed on a fireproof base, a small pit is made in the middle of the crystals and filled with glycerine. After a while, a small amount of smoke begins to develop, followed by spontaneous combustion. Depending on the amount of potassium permanganate and glycerine, the flame lasts a few seconds or a little longer.



A good tablespoon of potassium permanganate is placed on the fireproof base



Some time after the addition of glycerine, a little smoke rises. Now full attention is required!



The flame is here!



## Biblical interpretation:

The experiment serves to view:

*2.Exodus 19:18: And all Mount Sinai smoked, because the LORD came down upon the mountain in fire; and the smoke went up as the smoke of a furnace, and the whole mountain quaked greatly.*

*2.Exodus 22:5: If a fire breaks out and seizes the thorns and burns up a sheaf or the grain that is still standing or the field, then whoever kindled the fire shall make restitution.*

*2.Exodus 24:17: And the glory of the LORD was like a devouring fire on the top of the mountain before the Israelites.*

*2.Exodus 32:20: And he took the calf which they had made, and melted it in the fire, and ground it to powder, and scattered it upon the waters, and gave it to the children of Israel to drink.*

As there are many passages with fire, there are many other possibilities for interpreting this experiment.

### Keywords:

Fire, Chemistry, Chemical experiments, Experiments

### Proof of source

Cover picture: Markus Sigrist

Game idea: With the kind permission of BESJ (Bund Evangelischer Schweizer Jungscharen), slightly modified by Markus Sigrist