

The Miner's Lamp – hand crafted in the heart of the Welsh coal field by the sons and daughters of miners.

The Miner's Safety Lamp

In any history of Coal Mining the invention of the Safety Lamp must be seen as a major scientific breakthrough. Until Sir Humphry Davy invented his Safety Lamp in 1815 the main form of lighting came from candles. These naked flames caused many explosions and colliery deaths were all too common. In 1814 alone more than 160 men died in mining explosions throughout Britain.

The original Davy Lamp consisted of an oil lamp enclosed in a wire gauze, the lower part being of glass allowing light to shine through. Davy found that while the gauze allowed air to pass through to the flame for combustion, inflammable gas catching fire inside the lamp would be extinguished in the wire gauze, thus not setting fire to the explosive gases outside. However, this ceased to be the case if the gauze became very hot or was exposed to a draught. For this reason later lamps had a shield screening the gauze from draughts.

Another function of the lamp was to detect the presence of gas. The flame would be reduced and any gas present would burn around the flame, forming a pale blue cap.

The invention of the Safety Lamp should have made life underground safer and should have reduced the number of accidents, but with the colliery owners keen to exploit the new device miners were forced to work in gas-filled shafts where they would never have worked before. While some miners cursed Davy others were more grateful and Davy himself said he was: "Never more affected than by a written address which I received from the working colliers when I was in the North thanking me on behalf of themselves and their families for the preservation of their lives."

Davy refused to patent his Safety Lamp, turning down a certain fortune, saying "My sole object was to serve the cause of humanity" and although future Safety Lamps differed greatly in appearance the same principle was retained.

Directions For Use

1. Unscrew base of the lamp.
2. Unscrew wick holder and remove.
3. Fill reservoir with 15ml of paraffin or a recommended lamp oil. (This is sufficient for 2 to 3 hours of operation.) **Do not** overfill.
4. Wick setting should be level with wick holder and no higher than 2mm.
5. Replace wick holder and light.
6. Screw base back onto lamp.

To Extinguish

Blow through vent hole at the back of lamp. (Care should be taken handling the top half of the lamp which will be hot after use.)

Caution

It is highly dangerous to burn any substance other than paraffin or kerosene in this lamp. Under NO circumstances should any other fuel be used.

This lamp is designed for use as a lighted ornament only. The lamp does not contain the filters and seals found in a genuine miner's lamp and therefore should NEVER be used in circumstances in which a naked flame would be dangerous.

It is important to follow the above instructions to enjoy safely the benefits of your lamp.

To clean the lamp use a recommended metal polish.

Use the included coaster to protect table surfaces.



www.leevalley.com

1090 Morrison Drive	814 Proctor Avenue
Ottawa ON K2H 1C2	Ogdensburg NY 13669-2205
Canada	United States
1-800-267-8761	1-800-267-8735
customerservice@leevalley.com	

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