# IODINE

#### **Properties**

Under ordinary conditions iodine is solid black-grey with violet metallic luster substance. It is slightly soluble in water. Iodine is very toxic.





In heating iodine gives off violet vapors with acrid odour.

#### **Being in nature**

- Due to its chemical active iodine doesn`t occur in nature in a free state.
- It is rare element in spite of its little content in almost all. Iodine contains in all living organisms, water, minerals, soil. The largest quantity contains in seawater.
- Lautarite is the most famous mineral of iodine.
- 99% of reserves are in Chile and Japan.

### History

■ In 1811 Courtois first found iodine in ash of

seaweed.





■ In 1813 -1814 Gay-Lussac proved than iodine is new simple substance and chemical element.

## Applications

- Iodine is used in medicine as a solution for disinfection.
- It is used in technique as light source and to create batteries.
- It is used in criminology to detect fingerprints in paper surfaces.
- Iodine is used to create liquid crystal display.