

Phosphorus bombs

March 17, 2022

In news— Ukraine has accused Russian forces of launching white phosphorus bomb attacks in its eastern region of Lugansk recently.

About phosphorus bombs-

- White phosphorus(WP) bombs/munitions are weapons that **use one of the common allotropes of the chemical element phosphorus.**
- WP is **used in smoke, illumination,** and incendiary munitions, and is commonly the burning element of tracer ammunition.
- It has been **used since World War I** both as an incendiary agent and for creating smoke screens or smoke signals.
- Munitions containing white phosphorus were **used extensively in World War II , the Vietnam War, and the Korean War, including as an anti-personnel weapon.**
- **It was called as a 'flaming onion' by Nazis of Germany.**
- **Other common names for white phosphorus munitions include WP and the slang terms Willie Pete and Willie Peter, which are derived from William Peter.**
- **White phosphorus is an incendiary and toxic chemical substance** used as a filler in a number of different munitions that can be employed for a variety of military purposes.
- Once ignited, phosphorus in the bombs burns at temperatures above 800 degrees Celsius and it causes fires that can spread over several hundred square kilometres.
- White phosphorus **burns in air and causes severe burns upon contact with skin or eyes.** White phosphorus smoke

will also cause eye and respiratory tract irritation.

- It **can produce several chemicals when it comes in contact with the skin**, such as phosphorus pentoxide.
- Phosphorus pentoxide reacts with water in the skin and produces phosphoric acid that is highly corrosive.
- **The burn injuries caused by white phosphorus can damage underlying tissues that delay the healing process.**
- **WP** can be systemically absorbed by the body and cause damage to the internal organs.
- The particles of white phosphorus may remain in the wound and reignite when in contact with the air.

White phosphorus

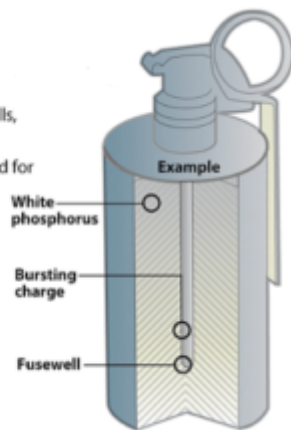
• **Weapons:** Mortar and artillery shells, grenades

• **Geneva Treaty of 1980:** Prohibited for attacking civilians; no ban on use as smoke screen or for illumination.

• **Looks:** Colorless to yellow translucent wax-like substance.

• **When exposed to oxygen:** It bursts into yellow flame, producing thick white smoke.

• **Phosphorus burns:** They are mostly second- or third-degree; particles do not stop burning after contact with skin.



International laws on its usage-

- White phosphorus munitions are **not considered a chemical weapon under the Chemical Weapons Convention**, and their primary **aim is to create thick smoke that can hide military forces or mark targets.**
- However, **International law prohibits the use of white phosphorus shells in heavily populated civilian areas**, but allows them in open spaces to be used as cover for troops.
- Under international law, white phosphorus is considered an incendiary weapon, **defined by Protocol III of the Convention on the Prohibition of Use of Certain Conventional Weapons** as *“any weapon or munition which is primarily designed to set fire to objects or to cause*

burn injury to persons through the action of flame, heat or combination thereof, produced by a chemical reaction of a substance delivered on the target."

- The protocol prohibits using incendiary weapons against military targets located among civilians, although the United States has not signed it and is not bound by it.
- In addition to it, the United Nations also consider White phosphorus as an incendiary or chemical weapon.

The Organization for the Prohibition of Chemical Weapons (OPCW) -

- The Chemical Weapons Convention of 1997 created an international body to adopt and uphold the provisions of the non-proliferation treaty, which forbids signatory states from using, stockpiling, or transferring chemical weapons.
- The Organization for the Prohibition of Chemical Weapons (OPCW) is allowed to conduct inspections to ensure that signatory states are abiding by the convention.
- The OPCW reports on its inspections and other operations to the UN through the Secretary General's office, as per the 2001 Relationship Agreement between the OPCW and the UN.
- The Nobel Peace Prize was given to the organisation in 2013 "for its systematic efforts to eradicate chemical weapons."

Further

reading:

<https://journalsofindia.com/indian-cag-as-external-auditor-of-opcw/>