# **USAF EXPLOSIVES** FIRE AND CHEMICAL HAZARD SYMBOLS

## **FIRE SYMBOLS**



### MASS DETONATION HAZARD

- Do not fight fire unless rescue attempt is planned
- If there is suitable separation to symbol 1 materials and Senior Fire Officer approves, firefighting forces may attempt to extinguish the fire.
- If personal safety is in doubt, take cover.



### NON-MASS EXPLOSION, FRAGMENT PRODUCING

- Sound alarm; attempt to extinguish fire if in early stage.
- Fight the fire if possible. If not possible, prevent spread of fire.
- Provide protection from fragmentation in case of detonation.



- May be fought if explosives not directly involved.
- If White Phosphorus (WP) munitions are involved, smoke is liberated.
- WP munitions may explode - Immerse Phosphorus in water or spray with water continuously.
- For fires involving Hexachlorethane (HC) and incendiaries use dry sand or dry powder in early stage.
- For fires involving pyrotechnics and magnesium incendiaries:
  - Protect adjacent facilities and equipment. - Do not use carbon dioxide. Halon
  - extinguishers or water on or near munitions.
  - Allow magnesium to cool unless upon flammable material. In this case, use a 2inch layer of dry sand or powder on the floor and rake the burning material onto this layer and re-smother.



#### **HAZARD DIVISION 1.4 MODERATE FIRE, NO BLAST OR FRAGMENT**

- Fight these fires. - Expect minor explosions and hot fragments.

**CHEMICAL HAZARD SYMBOLS** 



#### HIGHLY TOXIC CHEMICAL HAZARD SET 1

- Withdraw upwind.
- If explosion does not occur, approach from upwind and extinguish fire.
- Decontamination may be required.
- Set 1 consists of self-contained breathing apparatus and chemical-protective clothing with flash protection IAW applicable National Fire Protection Association Standards 1991, 1992 and 1994.



- Withdraw upwind.
- Approach from upwind and extinguish fire.
- Decontamination may be required. - Set 2 consists of self-contained breathing
- apparatus, coveralls and protective gloves. (Firefighting protective clothing and equipment may be used)



#### WHITE PHOSPHORUS (WP) MUNITIONS SET 3

For WP:

- Post fire guard until leaking phosphorous has been removed
- After removal of agents, post fire guard for 2 days for possible re-ignition.
- For Triethylaluminum (TEA), Platinum (PT) or Thorium (TH): - Do not use water.
  - Do not look at burning material.

# FIREFIGHTING DIRECTION SYMBOLS



#### WEAR BREATHING APPARATUS

- Approach from upwind and extinguish fire. . Wear breathing apparatus: consists of a self contained breathing apparatus. (Firefighting protective clothing and equipment may be used)



- Munitions burn with extremely high temperature and are difficult to extinguish.
- Water is NOT a suitable extinguishing agent as it may intensify the fire.
- Do not look directly at the burning material or eye damage may result.

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