

# Water Rocket Launcher Safety Guide



**To ensure safe construction and operation of the Neptune 9 Water Rocket Launcher, please follow these safety protocols:**

- 1. \*\*Wear Protective Gear\*\*:** Always wear safety goggles, gloves, and closed-toe shoes during construction and operation.
- 2. \*\*Work in a Well-Ventilated Area\*\*:** When using epoxy or drilling, ensure you work in a well-ventilated space to avoid inhaling fumes or dust.
- 3. \*\*Tool Safety\*\*:** Use tools such as drills, saws, and screwdrivers carefully. Keep hands clear of cutting surfaces and always disconnect power tools when not in use.
- 4. \*\*Pressure Precautions\*\*:**
  - Do not exceed recommended air pressure for your water rocket.
  - Always use a Schrader valve and ensure all hose clamps are tight and secure.
  - Never stand over or near the rocket while pressurizing.
  - Make sure the non-return valve is properly seated and airtight before pressurization.
- 5. \*\*Testing Area\*\*:** Choose an open outdoor space away from people, buildings, trees, and overhead power lines.
- 6. \*\*Secure the Launcher\*\*:** Use tent pegs through the drilled holes to secure the launcher to the ground and prevent shifting or tipping.
- 7. \*\*Safe Distance During Launch\*\*:** Use the paracord pull system to release the rocket from at least 5 meters away.
- 8. \*\*Do Not Modify Components\*\*:** Use all components as intended. Modifications can compromise structural integrity and safety.
- 9. \*\*Inspect Before Each Launch\*\*:** Check hoses, connections, and fittings for wear or damage before pressurizing the system.
- 10. \*\*Dispose of Chemicals Properly\*\*:** Epoxy and other adhesives must be disposed of in accordance with local regulations.

**11. \*\*Supervision for Minors\*\*:** Children must be supervised by an adult at all times during construction and launch.

**12. \*\*Post-Launch Inspection\*\*:** After each launch, check all parts of the launcher for damage or loose fittings before using again.

Following these safety measures helps ensure an exciting, educational, and safe rocket launching experience.