**TP-Link TL-SG1008P**

# TP-Link 8-Port Gigabit Desktop PoE+ Switch

Model: TL-SG1008P

## 1. Introduction

This manual provides instructions for the TP-Link TL-SG1008P 8-Port Gigabit Desktop PoE+ Switch. This device is designed to expand your network capacity with Power over Ethernet (PoE) capabilities, making it ideal for connecting PoE-compatible devices such as IP cameras, IP phones, and wireless access points.

The TL-SG1008P features 8 Gigabit Ethernet ports, with 4 of these ports supporting PoE (802.3af compliant) with a maximum power budget of 55W. Its fanless design ensures silent operation, and the sturdy metal casing provides durability. This product is a renewed item, professionally inspected and tested to work and look like new.

### Key Features:

- 8 Gigabit Ethernet Ports (10/100/1000 Mbps)
- 4 PoE+ Ports (802.3af compliant) with 55W total power budget
- Auto-negotiation for PoE power with PoE devices
- Protection for non-PoE devices
- Fanless design for silent operation
- Plug-and-Play setup
- Durable metal casing
- Traffic optimization features (QoS, IGMP Snooping)

## 2. Product Overview

The TL-SG1008P is a compact and robust network switch designed for desktop or wall-mount deployment. Below are images illustrating the product and its components.


Figure 2.1: TP-Link TL-SG1008P Switch and Retail Box

This image displays the TL-SG1008P switch alongside its product packaging, highlighting its compact size and the branding.


Figure 2.2: Front Panel of TL-SG1008P Switch

This image shows the front panel of the switch, detailing the 8 Ethernet ports (ports 1-4 are PoE enabled) and the corresponding LED indicators for power, PoE MAX, PoE status, Link/Act, and 1000Mbps connection speed.

## Front Panel Layout:

- **Power LED:** Indicates the power status of the switch.
- **PoE MAX LED:** Illuminates when the total PoE power consumption exceeds 80% of the maximum budget.
- **PoE Status LEDs (Ports 1-4):** Indicate PoE power delivery status for each port.
- **Link/Act LEDs (Ports 1-8):** Indicate a stable link and data activity for each port.
- **1000Mbps LEDs (Ports 1-8):** Indicate a Gigabit (1000Mbps) connection speed for each port.
- **Ports 1-4:** Gigabit Ethernet ports with PoE+ capability.
- **Ports 5-8:** Gigabit Ethernet ports without PoE capability.

## Rear Panel:

- **Power Input:** Connector for the external power adapter.

## 3. Setup and Installation

The TL-SG1008P is designed for simple plug-and-play installation, requiring no software configuration.

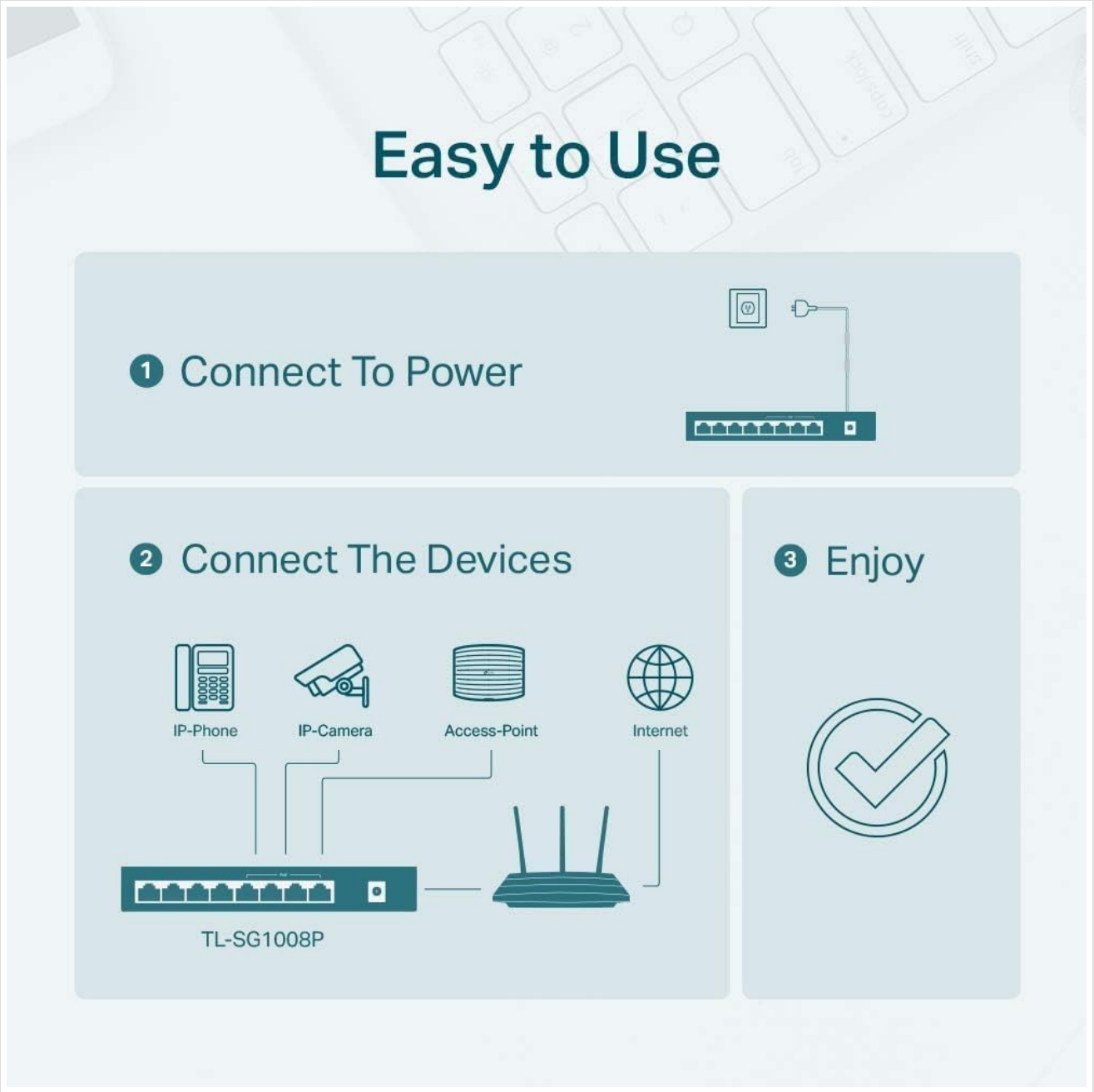


Figure 3.1: Easy Setup Diagram

This diagram illustrates the three simple steps for setting up the switch: connecting it to power, connecting your network devices, and then enjoying the network.

### Installation Steps:

1. **Connect to Power:** Connect the provided power adapter to the power input port on the rear panel of the switch, and then plug the adapter into a standard electrical outlet. The Power LED on the front panel should illuminate.
2. **Connect Devices:**
    - For PoE-powered devices (e.g., IP cameras, IP phones, wireless access points), connect them to any of the PoE ports (Ports 1-4) using standard Ethernet cables. The switch will automatically detect and provide power to these devices.

- For non-PoE devices (e.g., computers, routers, network printers), connect them to any of the 8 ports (Ports 1-8) using standard Ethernet cables. The switch will protect non-PoE devices from being damaged by overcurrent.

3. **Verify Connection:** Once devices are connected, check the Link/Act LEDs for the respective ports. A solid green light indicates a successful connection, and a blinking light indicates data activity. For Gigabit connections, the 1000Mbps LED will also be lit.

Ensure all cable connections are secure. The switch is now ready for operation.

## 4. Operating the Switch

The TL-SG1008P operates automatically once connected. It functions as a central hub for your wired network, facilitating high-speed data transfer between connected devices.

### Power over Ethernet (PoE) Functionality:

- The switch provides power and data over a single Ethernet cable to PoE-compatible devices connected to ports 1-4.
- The total power budget for PoE is 55W. If the total power consumption of connected PoE devices exceeds this limit, the PoE MAX LED will illuminate, and the switch may prioritize power delivery or cut power to lower-priority devices to prevent overload.

### Application Scenarios:

The TL-SG1008P is versatile and can be used in various networking environments:

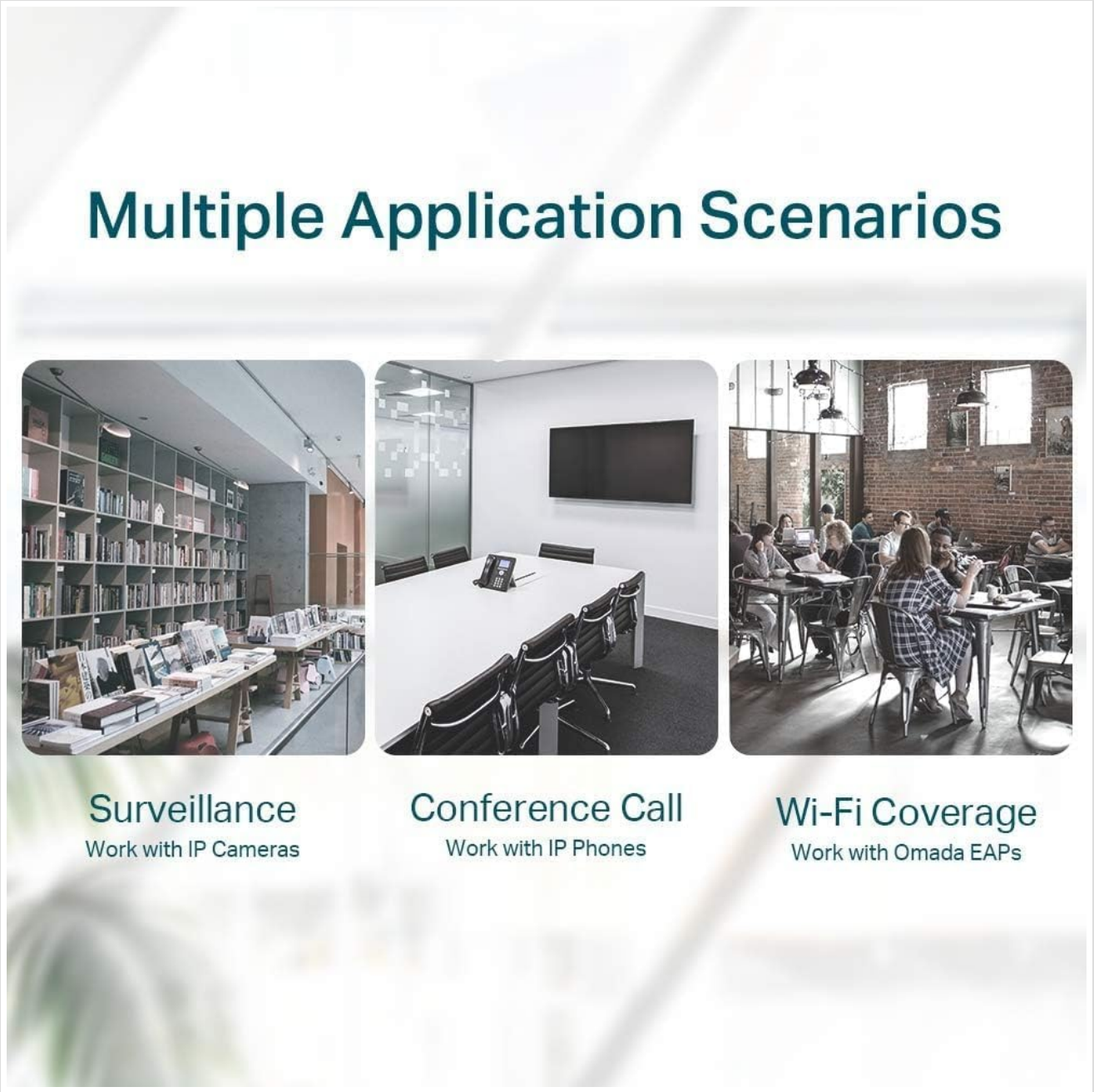


Figure 4.1: Multiple Application Scenarios

This image illustrates common uses for the switch, including powering IP cameras for surveillance, connecting IP phones for conference calls, and providing Wi-Fi coverage via Omada EAPs.

- **Surveillance:** Power and connect multiple IP cameras for security systems.
- **Conference Call:** Provide power and network connectivity to IP phones in office or home environments.
- **Wi-Fi Coverage:** Deploy wireless access points (EAPs) in locations without readily available power outlets.

## Advanced Functions:

The switch incorporates features to optimize network performance:

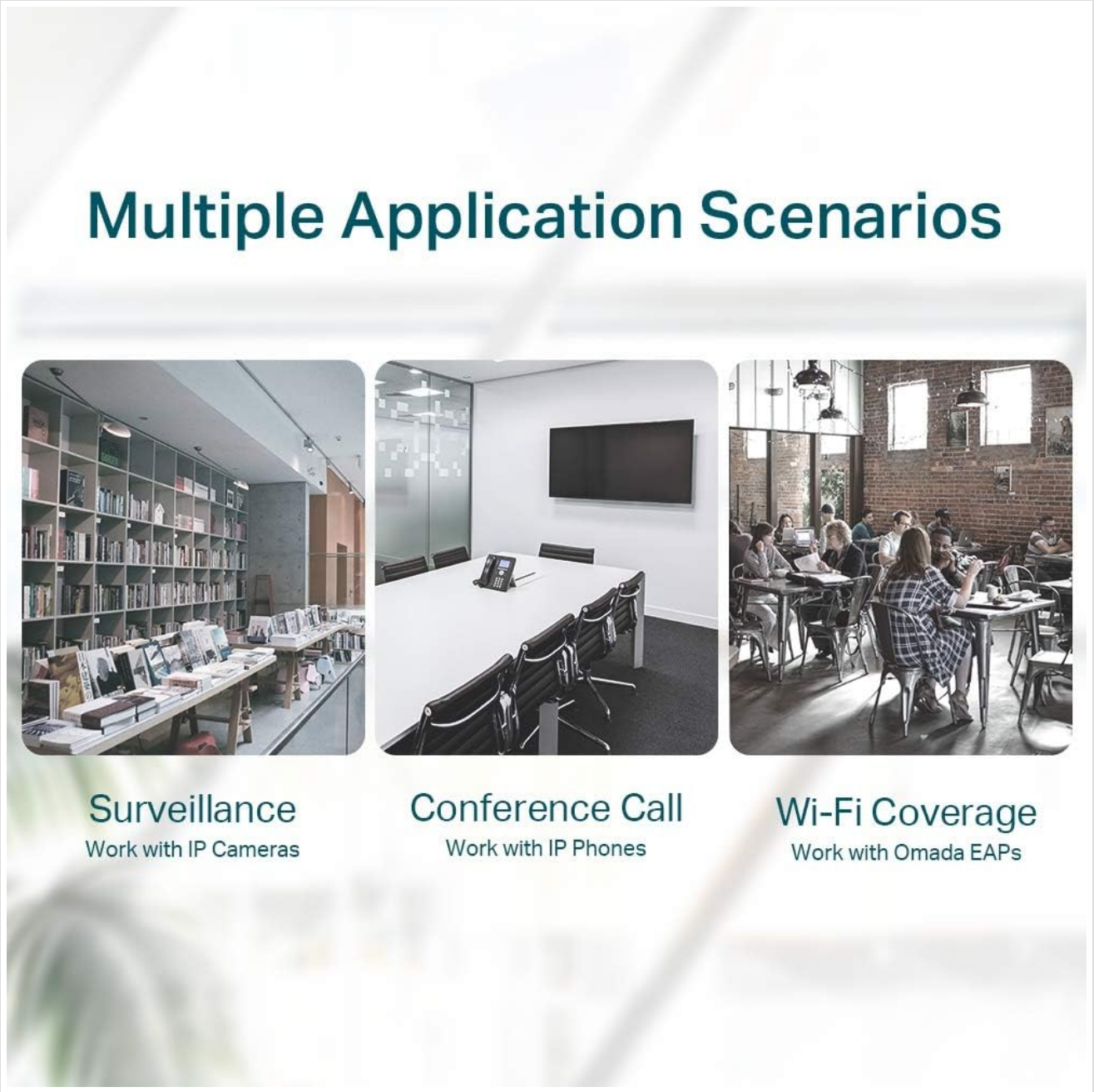


Figure 4.2: Advanced Functions

This image highlights two advanced features: Quality of Service (QoS) for a smooth online experience and IGMP Snooping for optimized IPTV traffic.

- **QoS (Quality of Service):** Prioritizes certain types of network traffic (e.g., voice or video) to ensure a fluent online experience, reducing lag and buffering.
- **IGMP Snooping:** Optimizes multicast traffic delivery, particularly useful for IPTV applications, by ensuring multicast streams are only sent to ports that have requested them.

## 5. Maintenance

To ensure optimal performance and longevity of your TL-SG1008P switch, follow these maintenance guidelines:

- **Placement:** Place the switch on a stable, flat surface or mount it securely to a wall. Ensure adequate ventilation around the device. Avoid placing it in direct sunlight or near heat sources.

- **Cleaning:** Regularly dust the exterior of the switch with a soft, dry cloth. Do not use liquid cleaners or aerosols. Ensure no dust accumulates in the ventilation holes.
- **Cable Management:** Keep network cables neatly organized and avoid excessive bending or crimping, which can affect performance.
- **Power Supply:** Use only the power adapter provided with the switch. Ensure the power outlet is stable and free from fluctuations.
- **Environmental Conditions:** Operate the switch within its specified temperature and humidity ranges. Avoid environments with high moisture or extreme temperatures.

## 6. Troubleshooting

If you encounter issues with your TL-SG1008P switch, refer to the following common troubleshooting steps:

- **No Power:**
  - Ensure the power adapter is securely connected to the switch and a working power outlet.
  - Check if the Power LED on the front panel is illuminated. If not, try a different power outlet.
- **No Link/Activity on a Port:**
  - Verify that the Ethernet cable is securely connected to both the switch port and the device.
  - Try a different Ethernet cable to rule out a faulty cable.
  - Ensure the connected device is powered on and functioning correctly.
  - If connecting a PoE device to ports 1-4, ensure the device is PoE compatible.
- **PoE Devices Not Receiving Power:**
  - Ensure the PoE device is connected to one of the PoE ports (1-4).
  - Check the PoE Status LED for the specific port. If it's off, the device may not be drawing power or there's an issue with the cable/device.
  - Observe the PoE MAX LED. If it's lit, the total power consumption might be exceeding the 55W budget. Disconnect some PoE devices to reduce the load.
  - Ensure the PoE device is 802.3af compliant.
- **Slow Network Speed:**
  - Ensure you are using Gigabit-capable Ethernet cables (Cat5e or higher).
  - Check the 1000Mbps LED for the port. If it's not lit, the connection is not at Gigabit speed. This could be due to the cable, the connected device, or a negotiation issue.
  - Minimize interference from other electronic devices.
- **Intermittent Connection Drops:**
  - Inspect all Ethernet cables for damage.
  - Ensure the switch is placed in a well-ventilated area and not overheating.
  - Try restarting the switch by unplugging and replugging the power adapter.

If problems persist after trying these steps, please refer to the support section.

## 7. Specifications

Below are the technical specifications for the TP-Link TL-SG1008P switch:

| Attribute | Value |
|---|---|
| Brand | TP-Link |
| Model | TL-SG1008P |
| Number of Ports | 8 (4 PoE+) |
| Data Transfer Rate | 1 Gigabits Per Second |
| Interface Type | PoE, Ethernet |
| PoE Standard | 802.3af Compliant |
| PoE Power Budget | 55W |
| Voltage | 48 Volts |
| Case Material | Metal |
| Color | Black |
| Product Dimensions | 11.1 x 8.8 x 2.8 inches |
| Item Weight | 12.7 ounces (360 Grams) |
| UPC | 751889002257 |
| Manufacturer | TP-LINK USA |

## 8. Warranty and Support

As a renewed product, the TP-Link TL-SG1008P is eligible for the Amazon Renewed Guarantee. This typically includes a replacement or refund if you are not satisfied with your purchase.

For specific warranty details, return policies, or technical support, please refer to the Amazon Renewed program terms or contact TP-Link customer support directly through their official website. Keep your purchase receipt for any warranty claims.

## 9. Legal Disclaimer

**WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.**