



**OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION**

WASHINGTON, D.C. 20460

November 17, 2025

**SENT BY EMAIL**

Jonathan Walsh  
jonathan.walsh@tsgconsulting.com  
LG ELECTRONICS, INC.

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 - Updating company address and other minor label changes  
Product Name: PuroTec ZAP  
Admin Number: 92827-1  
EPA Receipt Date: 11/10/2025  
Action Case Number: 00675765

Dear Jonathan Walsh:

The U.S. Environmental Protection Agency is in receipt of your application for notification under Pesticide Registration Notice 98-10 for the above referenced product. The EPA has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The labeling submitted with this application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

If you have questions, please contact Linda Amar via email at [amar.linda@epa.gov](mailto:amar.linda@epa.gov).

Sincerely,

Linda Amar, Risk Manager  
RMB 2, AD  
Office of Pesticide Programs

[Master Label]

**PuroTec™ ZAP**

(Alternate Brand Names: **Zinc Silicate Glass** or **LG PuroTec™ ZAP**)

A preservative and bacteriostatic agent for non-public health organisms use in the manufacture of polymer, plastic and latex products. For commercial and industrial use. Not for food use.

[This antimicrobial additive inhibits the growth of non-public health mold, mildew, bacteria and fungus that cause stain, odor and deterioration. It is intended for use in the manufacturing of commercial and consumer products to impart antimicrobial properties.]

[An antimicrobial additive that inhibits the growth of stain and odor causing non-public health bacteria, mold and mildew on the product to which it is applied. It is intended for use in the manufacturing of commercial and consumer products to impact antimicrobial properties.]

**Active Ingredient:**

Zinc Oxide.....37.2%

**Other Ingredients**.....62.8%

Total.....100.0%

**NOTIFICATION**

92827-1

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

11/17/2025

**KEEP OUT OF REACH OF CHILDREN**

**Caution**

[See side panel for additional precautionary statements]

FIRST AID	
<b>If In Eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If Swallowed</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If on Skin or Clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>GENERAL INFORMATION:</b> Have the product container or label with you when calling a poison control center or doctor or going for treatment. For non-emergency and general information on product use, etc., information pertaining to this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday – Friday, 8:00 am – 12:00 pm Pacific Time; email: npic@ace.orst.edu; or web site: www.npic.orst.edu. For emergencies, call the Poison Control Center 1-800-222-1222.	
<b>NOTE TO PHYSICIAN:</b> Probable mucosal damage may contraindicate the use of gastric lavage.	

**EPA Reg. No:** 92827-1

**EPA Est. No.:** 92827-KOR-2

LG Electronics, Inc

LG Twin Towers, 128

Yeoui-Daero, Yeongdeunpo-Gu

Seoul 250-721, Korea

**Net Contents:**

PuroTec™ ZAP (92827-1)

LG Electronics, Inc.

November 5, 2025

Page 1 of 7

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals:

**CAUTION:** Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wear appropriate protective eyewear such as face shield, goggles, or safety glasses. Wear a long-sleeved shirt and long pants, socks, shoes, and chemical resistant gloves (Barrier Laminate, or Butyl Rubber  $\geq$  14 mils, or Nitrile Rubber  $\geq$  14 mils, or Neoprene Rubber  $\geq$  14 mils, or Natural Rubber  $\geq$  14 mils, or Polyethylene, or Polyvinyl Chloride (PVC)  $\geq$  14 mils, or Viton  $\geq$  14 mils), and chemical-resistant apron when mixing and loading. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

## ENVIRONMENTAL HAZARDS

[For containers greater than 5 gallons]

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Not harmful to septic tanks. Contains no phosphorus.

[For containers less than 5 gallons:]

This product is toxic to fish and aquatic invertebrates.

## STORAGE AND DISPOSAL

Do not contaminate food or feed by storage or disposal or cleaning of equipment.

**STORAGE:** Store away from children. Reclose cap tightly after use. Store this product upright in a cool dry area away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water.

**PESTICIDE DISPOSAL:** Product or rinsates that cannot be used must be diluted with water before disposal in a sanitary sewer.

**CONTAINER HANDLING:** Non-refillable container. Do not reuse or refill container. Offer for recycling if available or reconditioning if appropriate or place in trash.

## DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

PuroTec™ ZAP is an antimicrobial additive to be used by compounding into many polymeric materials. It is designed to be incorporated during the manufacturing process to impart antimicrobial activity to the manufactured products. PuroTec™ ZAP suppresses the growth of nonpublic health algae, mold, mildew, fungi, yeast and bacteria which cause unpleasant odors, discoloration, staining, deterioration or corrosion only. No finished product incorporating PuroTec™ ZAP may make any public health claims relating to antimicrobial activity without first obtaining an EPA registration for the finished product which permits such claims, and without a tolerance or exemption from the requirement of a tolerance. When incorporated into treated articles, this product does not protect users of any such treated article or others against food borne or disease causing bacteria, viruses, germs or other disease causing organisms.

This product may not be used for any applications involving food contact, food packaging.

**MAXIMUM CONCENTRATION OF PRODUCT:** PuroTec™ ZAP may be incorporated into the types of products listed below at a maximum concentration of the product (on a weight basis of the finished products) of no more than as specified below for the following types of products:

Adhesives and sealants: 26.8% [(≤ 10 % w/w of the active ingredient)]

Ceramics, ceramic glazes, porcelain enamels, and other glasses: 40.3% [(≤ 15 % w/w of the active ingredient)]

Fibers: 40.3% [(≤ 15 % w/w of the active ingredient)]

Floor coverings: 40.3% [(≤ 15 % w/w of the active ingredient)]

Plastics, coatings, films, laminates and plastic composite materials: 40.3% [(≤ 15 % w/w of the active ingredient)]

[See [enclosed] [attached] [associated] documentation for complete directions for use.]

**TYPES OF PRODUCTS** – PuroTec™ ZAP may be incorporated into the following types of products:

1) Ceramics, ceramic glazes, porcelain enamels, and other glasses:

**Specific materials:** ceramics, glazes, dental glasses, borosilicate glasses, lead glasses, soda lime glasses, special glasses, porcelains, porcelain enamels, clays, concretes, and grouts.

**Applications:** This product may not be used for any applications involving food contact or food packaging. Applications include toilets, sinks, urinals, bidets, lavatories, bathtubs, tile, flooring, windows, shower doors, shower walls, shower trays, bath accessories, bathroom countertops, handles, and knobs, artificial marble except kitchen countertop, engineered stone except kitchen countertop, marble floors, marble walls, dental ceramics, necklaces, earrings, accessories, clock bands, toothbrush holders, shower mats, garden supplies, pots, outdoor furniture, outdoor chairs, bathroom supplies, outdoor sculptures, souvenirs, home appliances, cosmetics containers, beauty tools, bricks, pottery, and lighting equipment.

2) Plastics including post-industrial recycled materials (PIR), post-consumer recycled materials (PCR) and plastic composite materials:

**Specific materials:** Resins including alkyds, amino resins, (melamine formaldehyde and urea formaldehyde), polyester (PET, PBT, and PEN), polyamide (Nylon), polyimide, polypropylene (PP), polyethylene (PE) including high-density polyethylene, low-density polyethylene and linear low-

density polyethylene, polybutylene, polymethylpentene (PMP), polysiloxane, polyvinyl alcohol (PVOH), polyvinyl acetate (PVA), ethylene vinyl acetate (EVA), polyethylene copolymer, polyvinyl chloride (PVC), epoxies, phenolic, polycarbonate (PC), cellulose, cellulose acetate, polystyrene including expandable polystyrene, general purpose polystyrene and high impact polystyrene, styrene acrylonitrile (SAN), polyurethane, acrylic, polymethyl methacrylate, acrylonitrile-butadiene-styrene copolymer (ABS), acrylonitrilestyrene-acrylic copolymer (ASA), acetals, polyketones, polyphelylene, polyphenylene sulfide, polyphenylene oxide, polysulfones, liquid crystal polymer and fluoropolymers, amino resins, thermoplastic elastomer, rubber (including styrene, butadiene, common acrylonitrile rubber, CR, ethylene propylene diene monomer, styrene butadiene copolymer, isoprene), silicone, polyacetal (polyoxymethylene), and blends and copolymers thereof, polylactic acid, polyhydroxyalkanoate, polybutylene succinate, polyethersulfone, polycaprolactone, polybutylene adipate terephthalate, polyphenylsulfone, Polytetrafluoroethylene, and super absorbent polymer.

**Applications:** This product may not be used for any applications involving food contact or food packaging. This product is available in the following areas: electronics and appliances, kitchen and bathroom products, construction and interior materials, vehicles and vehicle parts, sports and outdoor product, and other areas. The detailed examples are not limited to the list below and may be extended to various things<sup>1</sup>.

Applications include air purifier, air conditioner, dehumidifier, exterior of refrigerator, handle and door of refrigerator, nonfood contact portions (i.e. housing) of food processor, coffeemaker, TV and their accessories, monitor and their accessories, washing machine, dryer, spin-dryer, vacuum cleaner, computer, keyboard, mouse, computer accessory, printer, multifunction printer, grinder, telephone, set-top box, copy machine, fax machine, beam projector, electric pen, stylus, speaker, camera, camera accessories, laptop, laptop accessories, tablet PC, tablet PC accessories, cellphone, cellphone accessories, bidet, iron, fan, hair dryer, speaker, charger, antenna, router, electronic shelf label, switch box, switch, fire alarm, electric lamp, multi plug, bathroom countertop, sink, sink drain trap, building materials and components, cabinet, flushing system, furniture, pipes, pipe fittings, tubing, housing of water heater, boiler, ceiling sheet, lighting equipment, wallpaper, wallboard, wall, flooring, floor covering, embedded building materials, blind, dressing table, tatami, door, stair, railing, canopy, window, window frame, roof tile, roof, vinyl siding, rain gutter, elevator, escalator, vehicle part, roof rack carrier of vehicle, vehicle accessory, handle, handle of vehicle, car navigation, black box, air filter, filter of vehicle, car seat, seat of vehicle, console of vehicle, baby seat, caravan, ventilation system in vehicle, helmet, indoor sports equipment, outdoor sports equipment, flippers, fin, mask, scuba diving equipment, skateboard equipment, rollerblade equipment, snowboard equipment, surfing board equipment, bicycle, bicycle accessories, ski, jet ski, camping gear, canoe, buoy, footwear, shoes, frame, picture frame, stationery, pen, glasses, toy, Lego, earphones, headphones, video game console, game controller, hanger, clothes hanger, instrument, musical instrument, credit card, suitcase, paper dispenser, door lock, padlock, comb, brush, hairclip, mats, mop, dustpan, plunger, broom, broom handle, toilet, bath accessories, drying rack, nail dryer, toilet seat, toilet and toilet lid, bidet, urinal, floor tile, ceiling tile, bathtub, spa, shower heads, shower hose, shower booth, shower curtain, washstand, bathtub drain stopper, toothbrush holder, button, switch, bath cover, towel rack, soap case, soap dispenser, trash can, toilet paper holder, razor, dryer, clothes horse, washing ball, medical bed<sup>2</sup>, hospital supplies<sup>2</sup>, housing of analysis equipment<sup>2</sup>, hearing aid, wheelchair, device housing, table, chair, microphone, mic, battery, cart, calculator, display shelf, grip, knob, hilt, strap, baby carriage, pushchair, dog bed,

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<sup>1</sup> Not including food contact surfaces or food contact packaging.

<sup>2</sup> This product does not protect users against bacteria, viruses or other disease organisms.



bags, shopping basket, plastic bag, travel bag, packaging, box, pallet, cosmetic cases, cosmetic housing, airplane table, train table, tray, water dispenser exterior components, water purifier exterior components, socket, watch, watchband, goggles, swimming goggles, life vest, sun lounger, shoehorn, umbrellas, scraper, gloves, fitness equipment, pet cage, pet bed, wardrobe, rail of stairs, deck, toilet diaper change table, artificial marble except kitchen countertop, engineered stone except kitchen countertop, hand dryer, water softener, POS (Point of Sales) terminals, scanner, hand held scanner, personal identification security system, remote controller, virtual reality equipment, control panel of electric equipment, knob of electric equipment, handle of electric equipment, button of electric equipment, display window, display protection film, key holder, card, casino token, watch strap, scroll wheel, artificial turf, eartip, pedals of vehicles, shoe insole and outsole, kiosk machine, keyboard cover, electronic equipment, medical monitor<sup>2</sup>, scooter, wagon, cosmetic tools, home appliance, building materials, and fence.

### 3) Coatings:

**Types of coatings:** All application methods including water borne, nonaqueous solvent borne, 100% solids, physical vapor deposition, radiation cure, thermal cure, liquid, slurry, and powder coatings.

**Specific materials:** Resins including alkyds, amino resins, (melamine formaldehyde and urea formaldehyde), polyester (PET, PBT, and PEN), polyamide (Nylon), polyimide, polypropylene (PP), polyethylene (PE) including high-density polyethylene, low-density polyethylene and linear low-density polyethylene, polybutylene, polymethylpentene (PMP), polysiloxane, polyvinyl alcohol (PVOH), polyvinyl acetate (PVA), ethylene vinyl acetate (EVA), polyethylene copolymer, polyvinyl chloride (PVC), epoxies, phenolic, polycarbonate, cellulose, cellulose acetate, polystyrene including expandable polystyrene, general purpose polystyrene and high impact polystyrene including expandable polystyrene, general purpose polystyrene and high impact polystyrene, polyurethane (PU), acrylic, polymethyl methacrylate, acrylonitrile-butadiene-styrene copolymer (ABS), acrylonitrile - styrene-acrylic copolymer (ASA), acetals, polyketones, polyphenylene, polyphenylene sulfide, polyphenylene oxide, polysulfones, liquid crystal polymer and fluoropolymers, amino resins, thermoplastic elastomer, rubber (including styrene, butadiene, common acrylonitrile rubber, CR, ethylene propylene diene monomer, styrene butadiene copolymer), silicone, polyacetal (polyoxymethylene), and blends and copolymers thereof, polylactic acid, polyhydroxyalkanoate, polybutylene succinate, polyethersulfone, polycaprolactone, polybutylene adipate terephthalate, and polyphenylsulfone.

**Applications:** This product may not be used for any applications involving food contact, food packaging. This product is available in the following areas: electronics and appliances, kitchen and bathroom products, construction and interior materials, vehicles and vehicle parts, sports and outdoor product, packaging and protective materials, and other areas. The detailed examples are not limited to the list below and may be extended to various things<sup>1</sup>.

Applications include toilet seats, toilets, sinks, urinals, bidets, lavatories, bathtubs, spas, tile, flooring, shower doors, shower walls, shower trays, bath and kitchen' accessories, plumbing supplies and fixtures, bathroom countertops, handles, knobs, automobile parts, shower curtains, mats, protective covers, waste containers, general purpose containers, shower heads, mops, brooms, tapes, packaging, gaskets, pipes, tubing, pipe fittings, whirlpool tub and spa components, structural reinforcement composites (e.g., fiber reinforced resin backings), furniture, window blinds, tools, keyboards, personal grooming equipment, footwear including boots, sports equipment, telephones, and computer equipment, carpets, rugs, mats, and broadloom and tile carpeting, plastic bag, deco film for interior, wallpaper, functional clothing, TV and their accessories, monitor and their accessories, electronic equipment, artificial leather, paper, nonwoven fabric, scooter, wagon, cosmetic tools, home appliance, medical monitor and building materials.

4) Fibers including post-industrial recycled materials (PIR) and post-consumer recycled materials (PCR):

**Specific materials:** Resins including polyester ("Dacron" PET, and PTT), acetate, polyolefins, polyamides (Nylon), polypropylene (PP), polyethylene (PE) including high-density polyethylene, low-density polyethylene, linear low-density polyethylene and high modulus polyethylene, acrylics, viscose, polyurethane "Rayon," polyvinyl alcohol (PVOH), polyvinyl Chloride (PVC), polyvinylidene chloride, polysaccharides, polyacetal (polyoxymethylene) and blends and copolymers thereof, polylactic acid, polyhydroxyalkanoate, polybutylene succinate, polyethersulfone, polycaprolactone, polybutylene adipate terephthalate, polyphenylsulfone, and cellulose fiber

**Applications:** This product may not be used for any applications involving food contact, food packaging. This product is available in the following areas: electronics and appliances, kitchen and bathroom products, housewares, interior materials, garments, vehicles and vehicle parts, sports and outdoor product, packaging and protective fabrics, and other areas. The detailed examples are not limited to the list below and may be extended to various things<sup>1</sup>.

Applications include fabrics for household applications, home furnishings, automotive fabrics, apparel, bedding, mattress cover pads and filling, pillow covers, sheets, blankets, fiberfill for quilts and pillows, table cloths, napkins, wiping cloths, mops, towels, vacuum cleaner bags, cushion pads, sleeping bags, brush bristles, air and dust filters, book covers, curtains, draperies, upholstery, wall covering fabrics, carpet underlay, carpet backing, conveyor belts that do not come in contact with any type of food, automotive and truck upholstery, automotive and truck carpeting and interior liners, apparel, outerwear, uniforms, coats, aprons, sportswear, sleepwear, stockings, socks, hosiery, caps, undergarments (undershirts, underwear, bras, thermal underwear), inner liners for jackets, shoes, gloves and helmets, sails, ropes, canvas, ducking, awnings, and umbrellas, shower ball, shower scraper, life vest, vertical blind, horizontal blind, window shade, medical clothing<sup>2</sup>, firefighter clothing, military uniform, industrial ropes, watch strap, medical bed<sup>2</sup>, medical curtains<sup>2</sup>, medical mask<sup>2</sup>, camping gear, camping tent, camouflage tent, shoe insole and outsole, carpet, tarp, raincoat, and parasol.

5) Adhesives and Sealants including post-industrial recycled materials (PIR) and post-consumer recycled materials (PCR):

**Specific materials:** Resins including alkyds, amino resins, (melamine formaldehyde and urea formaldehyde), polyester (PET, PBT, and PEN), polyamide (Nylon), polyimide, polypropylene (PP), polyethylene (PE) including high-density polyethylene, low-density polyethylene and linear low-density polyethylene, polybutylene, polymethylpentene (PMP), polysiloxane, polyvinyl alcohol (PVOH) polyvinyl acetate (PVA), ethylene vinyl acetate (EVA), polyethylene copolymer, polyvinyl chloride (PVC), epoxies, phenolic, polycarbonate, cellulose, cellulose acetate, polystyrene including expandable polystyrene, general purpose polystyrene and high impact polystyrene, polyurethane, acrylic, polymethyl methacrylate, acrylonitrile-butadiene-styrene copolymer (ABS), acrylonitrile - styrene-acrylic copolymer (ASA), acetals, polyketones, polyphelylene, polyphenylene sulfide, polyphenylene oxide, polysulfones, liquid crystal polymer and fluoropolymers, amino resins, thermoplastic elastomer, rubber (including styrene, butadiene, common acrylonitrile rubber, CR, ethylene propylene diene monomer, styrene butadiene copolymer), silicone, polyacetal (polyoxymethylene), and blends and copolymers thereof, polylactic acid, polyhydroxyalkanoate, polybutylene succinate, polyethersulfone, polycaprolactone, polybutylene adipate terephthalate, and polyphenylsulfone.

**Applications:** This product may not be used for any applications involving food contact, food packaging. This product is available in the following areas: electronics and appliances, kitchen and bathroom products, construction and interior materials, vehicles and vehicle parts, sports and

outdoor product, garments, and other areas. The detailed examples are not limited to the list below and may be extended to various things<sup>1</sup>.

Applications include adhesives used in the manufacture of toilet seats, toilets, sinks, urinals, bidets, lavatories, bathtubs, spas, tile, flooring, shower doors, shower walls, shower trays, bath accessories, plumbing supplies and fixtures, countertops, handles, knobs, automobile parts, shower curtains, mats, protective covers, waste containers, general purpose containers, shower heads, mops, brooms, tapes, packaging, gaskets, pipes, tubing, pipe fittings, whirlpool tub and spa components, structural reinforcement composites (e.g., fiber reinforced resin backings), furniture, window blinds, keyboards, personal grooming equipment, footwear including boots, sports equipment, telephones, and computer equipment, construction sealant, toys, electronic equipment, sports tape, clothing, and battery

**6) Masterbatch or Formulation intermediate uses:** It is possible to apply PuroTec ZAP in intermediate concentrations which will be further processed to produce finished products and formulations. It can be used in intermediate concentrations up to 43% by weight, for example 43 lbs. of product per 57 lbs. substrates (i.e., as a master batch) intended for further processing in an industrial environment into the finished products and formulations listed above. This rate applies only to intermediate manufacturing/industrial uses. Anything created with the intermediate concentrates must not exceed the label application rates.

{Non-FIFRA Related Label Elements}

UN3077 Environmentally Hazardous Substance, Solid, N.O.S. (Frits, chemical)



{Marketing Claims}

- protected with LG PuroTec™