

ACT Z-200 ANTIMICROBIAL POWDER FORMULATION
A MICROBIOCIDE FOR USE IN THE MANUFACTURE AND PRESERVATION OF COMMODITY PRODUCTS

ACTIVE INGREDIENTS:

MATERIAL	
SILVER	0.24%
ZINC OXIDE	95.94%
INERT INGREDIENTS	<u>3.82%</u>
TOTAL:	100.00%

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

KEEP OUT OF REACH OF CHILDREN

CAUTION

CAUTION

FIRST AID

STORAGE AND DISPOSAL

IF INHALED:

- MOVE PERSON TO FRESH AIR
- IF PERSON IS NOT BREATHING, CALL 911 OR AN AMBULANCE, THEN GIVE ARTIFICIAL RESPIRATION, PREFERABLY BY MOUTH-TO-MOUTH, IF POSSIBLE.
- CALL A POISON CONTROL CENTER OR DOCTOR FOR FURTHER TREATMENT ADVICE

CAUTION: HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH THE SKIN. AVOID CONTACT WITH EYES OR SKIN. AVOID CONTAMINATION OF COOKING UTENSILS AND FOOD PREPARATION SURFACES. AVOID BREATHING DUST. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING.

DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL.

IF ON SKIN OR CLOTHING:

- TAKE OFF CONTAMINATED CLOTHING.
- RINSE SKIN IMMEDIATELY WITH PLENTY OF WATER FOR 15-20 MINUTES.
- CALL A POISON CONTROL CENTER OR DOCTOR FOR TREATMENT ADVICE.

ENVIRONMENTAL HAZARDS: THIS PRODUCT IS TOXIC TO FISH. KEEP OUT OF ANY NATURAL BODY OF WATER. DO NOT CONTAMINATE WATER BY CLEANING OF EQUIPMENT OR DISPOSAL OF WASTES. DO NOT DISCHARGE EFFLUENT CONTAINING THIS PRODUCT INTO LAKES, STREAMS, PONDS, ESTUARIES, OCEANS, OR OTHER WATER UNLESS IN ACCORDANCE WITH THE REQUIREMENTS OF 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.

STORAGE: DO NOT STORE IN AREAS ACCESSIBLE TO CHILDREN. DO NOT STORE IN PLACES WHERE FOOD OR FEED MAY COME IN CONTACT WITH THE PRODUCT. KEEP AWAY FROM DIRECT SUNLIGHT.

DISPOSAL: UNUSED MATERIAL SHOULD BE DISPOSED OF ON SITE OR AN APPROVED WASTE DISPOSAL FACILITY.

IF IN EYES:

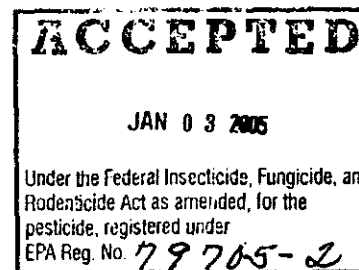
- HOLD EYE OPEN AND RINSE SLOWLY AND GENTLY WITH WATER FOR 15-20 MINUTES.
- REMOVE CONTACT LENSES, IF PRESENT, AFTER THE FIRST 5 MINUTES, THEN CONTINUE RINSING EYE.
- CALL A POISON CONTROL CENTER OR DOCTOR FOR TREATMENT ADVICE.

CONTAINER DISPOSAL: COMPLETELY EMPTY LINER BY SHAKING AND TAPPING SIDES AND BOTTOM TO LOOSEN CLINGING PARTICLES. EMPTY RESIDUE INTO APPLICATION EQUIPMENT. THEN DISPOSE OF LINER IN A SANITARY LANDFILL OR BY INCINERATION, IF ALLOWED BY STATE AND LOCAL AUTHORITIES. IF DRUM IS CONTAMINATED AND CANNOT BE REUSED, DISPOSE OF IN THE SAME MANNER.

IF SWALLOWED:

- CALL POISON CONTROL CENTER OR DOCTOR IMMEDIATELY FOR TREATMENT ADVICE.
- HAVE PERSON SIP A GLASS OF WATER IF ABLE TO SWALLOW.*
- DO NOT INDUCE VOMITING UNLESS TOLD TO DO SO BY THE POISON CONTROL CENTER OR DOCTOR.
- DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
- * THE STATEMENTS FOR PRODUCTS CONTAINING PETROLEUM DISTILLATES MAY BE DIFFERENT.

PRODUCT INFORMATION: 1-866-544-2477
MEDICAL EMERGENCIES: 1-866-544-2477



EPA REGISTRATION NO. 79705-2
EPA ESTABLISHMENT NO. 079705-MA-001

AIRQUAL CORPORATION CANTON, MA 02021

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DIRECTIONS FOR USE:

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT INCONSISTENT WITH ITS LABELING.

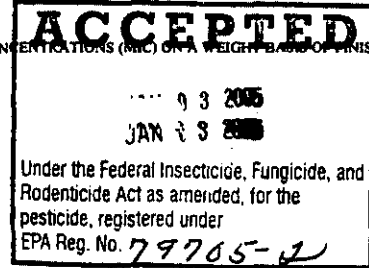
CLAIMS: ACT Z-200 IS AN ANTIMICROBIAL POWDER FOR COMMERCIAL USE. IT IS DESIGNED TO BE INCORPORATED INTO THE MATERIALS LISTED BELOW AS PART OF THE MANUFACTURING PROCESS TO IMPART ANTIMICROBIAL ACTIVITY TO THE MANUFACTURED MATERIALS. ACT Z-200 ANTIMICROBIAL POWDER SUPPRESSES THE GROWTH OF BACTERIA, MOLD, AND FUNGI, INCLUDING THOSE RESPONSIBLE FOR UNPLEASANT ODORS, AND DISCOLORATION OF THE FINISHED PRODUCT.

PRODUCTS CONTAINING ACT Z-200 MAY NOT MAKE CLAIMS OF ANTIMICROBIAL ACTIVITY OTHER THAN PROTECTION OF THE ARTICLE ITSELF AGAINST GROWTH OF BACTERIA, MOLD, AND FUNGI IN THE TREATED ARTICLE. IF GROWTH OF BACTERIA, MOLD AND FUNGI IN THE TREATED ARTICLE WOULD LEAD TO UNPLEASANT ODORS AND DISCOLORATION OF THE TREATED ARTICLE, THEN SUCH A CLAIM MAY BE MADE.

THIS PRODUCT MAY NOT BE USED FOR ANY APPLICATIONS INVOLVING FOOD CONTACT, FOOD PACKAGING OR HUMAN DRINKING WATER.

FINISHED MATERIALS: ACT Z-200 MAY BE INCORPORATED INTO THE FOLLOWING MATERIALS AT THE SPECIFIED MAXIMUM INHIBITORY CONCENTRATIONS (MIC) ON A WEIGHT-BASED BASIS OF FINISHED PRODUCTS.

APPLICATION	MIC
PLASTICS (SEE SEPARATE DESCRIPTION OF RESINS AND APPLICATIONS)	15.0%
FIBERS (SEE SEPARATE DESCRIPTION OF RESINS AND APPLICATIONS)	15.0%
COATINGS (SEE SEPARATE DESCRIPTION OF RESINS AND APPLICATIONS)	10.0%
ADHESIVES AND SEALANTS (SEE SEPARATE DESCRIPTION OF RESINS AND APPLICATIONS)	10.0%



TYPES OF MATERIAL

(1) **PLASTICS INCLUDING FILMS, SHEETS, SLABS, AND MOLDED PLASTIC PARTS:** RESINS: INCLUDING POLYESTER (PET, PBT, AND PEN), POLYAMIDE, (NYLON), POLYIMIDE, POLYPROPYLENE (PP), POLYETHYLENE (PE), POLYBUTYLENE, POLYMETHYLPENTENE (PMP), POLYSILOXANE, POLYVINYL ALCOHOL (PVOH), POLYVINYLACETATE (PVA), ETHYLENEVINYLACETATE (EVA), POLYETHYLENE COPOLYMER, POLYVINYL CHLORIDE (PVC), EPOXY, PHENOLIC, POLYCARBONATE, CELLULOSICS, CELLULOSE ACETATE, POLYSTYRENE, POLYURETHANE, ACRYLIC, POLYMETHYL METHACRYLATE, ACRYLONITRILE-BUTADIENE-STYRENE COPOLYMER (ABS), ACRYLONITRILE-STYRENE-ACRYLIC COPOLYMERS (ASA), ACETALS, POLYKETONES, POLYPHENYLENE ETHER, POLYPHENYLENE SULFIDE, POLYPHENYLENE OXIDE, POLYSULFONES, LIQUID CRYSTAL POLYMERS AND FLUOROPOLYMERS, AMINO RESINS, THERMO PLASTIC ELASTOMERS, RUBBERS (INCLUDING STYRENE BUTADIENE RUBBER, ACRYLONITRILE BUTADIENE RUBBER, CR), POLYACETAL (POLYOXYMETHYLENE), AND BLENDS OF COPOLYMERS THEREOF.

APPLICATIONS: THIS PRODUCT MAY NOT BE USED FOR ANY APPLICATIONS INVOLVING FOOD CONTACT, FOOD PACKAGING, OR HUMAN DRINKING WATER. APPLICATIONS INCLUDING AUTOMOBILE PARTS, SHOWER CURTAINS, MATS, PROTECTIVE COVERS, TAPE, PACKAGING, GASKETS, WASTE CONTAINERS, GENERAL PURPOSE CONTAINERS, BRUSH HANDLES, SPONGES, MOPS, VACUUM CLEANER BAGS, INSULATORS, PLASTIC FILM, INDOOR AND OUTDOOR FURNITURE, TUBING, INSULATION FOR WIRE AND CABLE, PLUMBING SUPPLIES AND FIXTURES, SIDING FOR HOUSING, LINERS, NON-WOVEN FABRICS, KITCHEN AND BATHROOM HARDWARE, APPLIANCES AND EQUIPMENT, COUNTERTOPS NOT INCLUDING KITCHEN COUNTERTOPS OR ANY OTHER FOOD-CONTACT COUNTERTOPS*, SINKS, FLOORING, FLOOR COVERING, TILES, DISHES, CONVEYER BELTS, FOOTWEAR INCLUDING BOOTS, TOOLS, COMMUNICATION EQUIPMENT, PERSONAL GROOMING EQUIPMENT, PERSONAL CARDS, SPORTS AND EXERCISE EQUIPMENT, AND WHEELS.

*NOTE: ALLOWABLE COUNTERTOP USE INCLUDES, FOR EXAMPLE, COUNTERTOPS IN BATHROOMS, DRESSING AREAS OR GARAGE WORK-BENCH AREAS IN PRIVATE RESIDENCES, AND CUSTOMER-SERVICE COUNTERTOPS IN NON-FOOD COMMERCIAL ESTABLISHMENTS, BUT DOES NOT INCLUDE COUNTERTOPS IN FAST-FOOD RESTAURANTS OR COUNTERTOPS IN FOOD PROCESSING AREAS OF FOOD MANUFACTURING FACILITIES.

(2) **FIBERS-RESINS:** INCLUDING ACETATE, POLYESTER ("DACRON", PET, AND PTT), POLYOLEFINS, POLYETHYLENE, POLYPROPYLENE, POLYAMIDES INCLUDING "NYLON", ACRYLICS, VISCOSE, POLYURETHANE, AND "RAYON". POLYVINYL ALCOHOL, POLYVINYL CHLORIDE, POLYVINYLIDENE CHLORIDE, POLYSACCHARIDE, AND COPOLYMERS AND BLENDS THEREOF.

APPLICATIONS: THIS PRODUCT MAY NOT BE USED FOR ANY APPLICATIONS INVOLVING FOOD CONTACT, FOOD PACKAGING, OR HUMAN DRINKING WATER.

APPLICATIONS INCLUDING: HOME FURNISHINGS: MATTRESS COVER PADS, PILLOW COVERS, SHEETS, BLANKETS, FIBERFILL FOR QUILTS AND PILLOWS, CURTAINS AND DRAPERIES, CARPET AND CARPET UNDERLAY, UPHOLSTERY, TABLE CLOTHS, NAPKINS, WIPING CLOTHS, TOWELS, TOWELS, BAGS, WALLCOVERING FABRICS, CUSHION PADS, SLEEPING BAGS AND BRUSH BRISTLES.

TRANSPORTATION: AUTOMOTIVE AND TRUCK UPHOLSTERY, CARPETING, REAR DECKS, TRUNK LINERS, CONVERTIBLE TOPS AND INTERIOR LINERS.

APPAREL: UMBRELLAS, OUTERWEAR, TRIM FOR OUTERWEAR, INTERLINERS FOR JACKETS, COATS, UNIFORMS, SHOES, GLOVES AND HELMETS, CAPS, APRONS, SPORTSWEAR, SLEEPWEAR, STOCKINGS, SOCKS, HOSIERY, AND UNDERGARMENTS.

INDUSTRIAL AND HOUSEHOLD ITEMS: BRUSH BRISTLES, ARTIFICIAL LEATHER, FILTERS, BOOK COVERS, MOPS, CLOTH FOR SAILS, ROPES, TENTS AND OTHER OUTDOOR EQUIPMENT, TARPS, AND AWNINGS.

(3) **COATINGS-RESINS:** INCLUDING ALKYDS, AMINO RESINS (MELAMINE FORMALDEHYDE AND UREA FORMALDEHYDE) POLYESTER (UNSATURATED POLYESTER, PET, PBT, AND PEN), POLYAMIDE (NYLON), POLYIMIDE, POLYPROPYLENE (PP), POLYETHYLENE (PE), POLYBUTYLENE, POLYMETHYLPENTENE (PMP), POLYSILOXANE, POLYVINYL ALCOHOL (PVOH), POLYVINYLACETATE (PVA), ETHYLENE-VINYLACETATE (EVA), POLYETHYLENE COPOLYMER, POLYVINYL CHLORIDE (PVC, INCLUDING PLASTISOL), POLYVINYLIDENE CHLORIDE (PBDC), EPOXY, PHENOLIC, POLYCARBONATE, CELLULOSICS, CELLULOSE ACETATE, POLYSTYRENE, POLYURETHANE, ACRYLIC, POLYMETHYL METHACRYLATE, ACRYLONITRILE-BUTADIENE-STYRENE COPOLYMER (ABS), ACRYLONITRILE-STYRENE-ACRYLIC COPOLYMER (ASA), ACETALS, POLYKETONES, POLYPHENYLENE ETHER, POLYPHENYLENE SULFIDE, POLYPHENYLENE OXIDE, POLYSULFONES, LIQUID CRYSTAL POLYMERS AND FLUOROPOLYMERS, THERMO PLASTIC ELASTOMERS, RUBBERS (INCLUDING STYRENE BUTADIENE RUBBER, ACRYLONITRILE BUTADIENE RUBBER, CR), POLYACETAL (POLYOXYMETHYLENE), AND BLENDS AND COPOLYMERS THEREOF.

TYPES OF COATINGS: WATER-BORNE, SOLVENT-BORNE, 100% SOLIDS, AND LIQUID AND POWDER COATINGS

APPLICATIONS: THIS PRODUCT MAY NOT BE USED FOR ANY APPLICATIONS INVOLVING FOOD CONTACT, FOOD PACKAGING, OR HUMAN DRINKING WATER. APPLICATIONS INCLUDING WALLS, WALLBOARD, FLOORS, CONCRETE, SIDING, ROOFING SHINGLES, INDUSTRIAL EQUIPMENT NATURAL AND SYNTHETIC FIBERS AND FABRICS, FURNITURE, AUTOMOTIVE AND VEHICULAR PARTS, PACKAGING PAPER PRODUCTS (WALL COVERINGS, TOWELS, BOOK COVERS), BARRIER FABRICS FOR CEMENT TILE AND FIR VITREOUS CHINA USE IN PLUMBING FIXTURES SUCH AS TOILETS, SINKS AND COUNTERTOPS* NOT INCLUDING KITCHEN COUNTERTOPS OR ANY OTHER FOOD-CONTACT COUNTERTOPS, COMMUNICATION EQUIPMENT, PERSONAL GROOMING EQUIPMENT, PERSONAL CARDS, SPORT AND EXERCISE EQUIPMENT, AND WHEELS.

*NOTE: ALLOWABLE COUNTERTOP USE INCLUDES, FOR EXAMPLE, COUNTERTOPS IN BATHROOMS, DRESSING AREAS OR GARAGE WORK-BENCH AREAS IN PRIVATE RESIDENCES, AND CUSTOMER-SERVICE COUNTERTOPS IN NON-FOOD COMMERCIAL ESTABLISHMENTS, BUT DOES NOT INCLUDE COUNTERTOPS IN FAST-FOOD RESTAURANTS OR COUNTERTOPS IN FOOD PROCESSING AREAS OF FOOD MANUFACTURING FACILITIES.

(4) **ADHESIVES AND SEALANTS-RESINS:** INCLUDING ALKYDS, AMINO RESINS (MELAMINE FORMALDEHYDE AND UREA FORMALDEHYDE) POLYESTER (UNSATURATED POLYESTER, PET, PBT, AND PEN), POLYAMIDE (NYLON), POLYIMIDE, POLYPROPYLENE (PP), POLYETHYLENE (PE), POLYBUTYLENE, POLYMETHYLPENTENE (PMP), POLYSILOXANE, POLYVINYL ALCOHOL (PVOH), POLYVINYLACETATE (PVA), ETHYLENE-VINYLACETATE (EVA), POLYETHYLENE COPOLYMER, POLYVINYL CHLORIDE (PVC, INCLUDING PLASTISOL), POLYVINYLIDENE CHLORIDE (PBDC), EPOXY, PHENOLIC, POLYCARBONATE, CELLULOSICS, CELLULOSE ACETATE, POLYSTYRENE, POLYURETHANE, ACRYLICS, CYANOACRYLATES, POLYMETHYL METHACRYLATE, ACRYLONITRILE-BUTADIENE-STYRENE COPOLYMER (ABS), ACRYLONITRILE-STYRENE-ACRYLIC COPOLYMER (ASA), ACETALS, POLYKETONES, POLYPHENYLENE ETHER, POLYPHENYLENE SULFIDE, POLYPHENYLENE OXIDE, POLYSULFONES, LIQUID CRYSTAL POLYMERS AND FLUOROPOLYMERS, THERMO PLASTIC ELASTOMERS, RUBBER (INCLUDING STYRENE BUTADIENE RUBBER, ACRYLONITRILE BUTADIENE RUBBER, CR), POLYACETAL (POLYOXYMETHYLENE), AND BLENDS AND COPOLYMERS THEREOF.

METHODS OF APPLICATION: HOT-MELT, AQUEOUS, SOLVENT BORNE, 100% SOLIDS, RADIATION CURE.

APPLICATIONS: THIS PRODUCT MAY NOT BE USED FOR ANY APPLICATIONS INVOLVING FOOD CONTACT, FOOD PACKAGING, OR HUMAN DRINKING WATER. APPLICATIONS INCLUDING ADHESIVES USED IN THE MANUFACTURE OF WOOD AND PLASTIC COMPOSITES, ADHESIVES FOR CERAMIC TILE, WOOD, PAPER, CARDBOARD, RUBBER AND PLASTIC, GLAZING FOR WINDOWS, GROUT, AND SEALANTS FOR PIPES, ADHESIVES, SEALANTS AND INSULATING MATERIALS FOR APPLIANCES, BATHROOMS, SHOWERS, KITCHENS, AND CONSTRUCTION.

(5) **MISCELLANEOUS APPLICATIONS-MATERIALS:** CLAY, CHINA, CERAMICS, CONCRETE, SAND, AND GROUT

APPLICATIONS: THIS PRODUCT MAY NOT BE USED FOR ANY APPLICATION INVOLVING FOOD CONTACT, FOOD PACKAGING, OR HUMAN DRINKING WATER. APPLICATIONS INCLUDING TOILETS, SINKS, TILE, FLOORING, STUCCO, PLASTER, CAT LITTER, DRAINAGE AND SEWERAGE PIPE