Re-Juv-Nal®

A phosphate-free, pH neutral formulation designed to provide effective cleaning, deodorizing, and disinfection for hospitals, nursing homes, schools, food processing plants, food service establishments, restaurants, transportation terminals, office buildings, manufacturing facilities, lodging establishments, hotels, retail business, and athletic/recreation facilities, sports stadiums, amphitheaters and convention centers where housekeeping is of prime importance in controlling cross-contamination from treated surfaces. Active Ingredients: Octyl decyl dimethyl ammonium chloride 1.627%, Dioctyl dimethyl ammonium chloride 0.814%, Didecyl dimethyl ammonium chloride 0.814%, Alkyl (50% C14, 40% C12, 10% C16) dimethyl benzyl ammonium chloride 2.170%, Inert Ingredients 94.575%.

Features & Benefits
- Disinfectant/detergent cleaner with neutral pH.
- Leaves a pleasant scent.
- EPA registered disinfectant.

Efficacy

BACTERICIDAL ACTIVITY - At the 2 ounce per gallon dilution, Re-Juv-Nal demonstrates effective disinfectant activity against the organisms:

- Pseudomonas aeruginosa PRD-10
- Salmonella (choleraeuis) enterica
- Staphylococcus aureus
- Staphylococcus aureus (clinical isolate)
- Bordetella bronchiseptica
- Corynebacterium ammoniacogenes
- Enterobacter aerogenes
- Enterobacter cloacae
- Enterobacter cloacae (clinical isolate)
- Enterococcus faecalis
- Enterococcus faecalis (clinical isolate)
- Escherichia coli
- Escherichia coli (clinical isolate)
- Fusobacterium necrophorum
- Klebsiella pneumoniae subsp. pneumoniae
- Lactobacillus casei subsp. rhamnosus
- Listeria monocytogenes
- Pasteurella multocida
- Proteus mirabilis ATCC 9921
- Proteus mirabilis ATCC 25953
- Proteus vulgaris
- Salmonella (paratyphi B) enterica
- Salmonella (typhi) enterica
- Salmonella (typhimurium) enterica
- Salmonella (polllorum) enterica
- Serratia marcescens
- Shigella sonnei
- Shigella flexneri Type 2b
- Shigella dysenteriae
- Staphylococcus aureus subsp. aureus
- Staphylococcus epidermidis
- Staphylococcus epidermidis (clinical isolate)
- Streptococcus pyogenes (Clinical - Flesh Eating Strain BIRD M3)
- Streptococcus pyogenes Group A
- Xanthomonas maltophilia (clinical isolate)
- Vancomycin resistant Enterococcus faecalis (VREF)
- Methicillin resistant Staphylococcus aureus (MRSA)
- Vancomycin intermediate resistant
- Staphylococcus aureus

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FUNCTIONAL ACTIVITY - At the 2 ounce per gallon dilution, Re-Juv-Nal is fungicidal against the pathogenic fungi:

- Trichophyton mentagrophytes (Athletes Foot Fungus)
- Candida albicans

FUNGICIDAL ACTIVITY - At the 2 ounce per gallon dilution, Re-Juv-Nal is fungicidal against the pathogenic fungi:

- Trichophyton mentagrophytes (Athletes Foot Fungus)
- Candida albicans

VIRUCIDAL ACTIVITY - Re-Juv-Nal when used on environmental, inanimate, hard, non-porous surfaces exhibits effective virucidal activity against:

- HIV-1
- HIV-2
- Hepatitis B Virus (HBV)
- Hepatitis C Virus (HCV)
- Herpes Simplex Type 1 (causative agent of fever blisters)
- Herpes Simplex Type 2 (genital)
- Influenza A2/Hong Kong
- Vaccinia
- Rotavirus
- Human Coronavirus (ATCC VR-740, Strain 229E)
- SARS Associated Coronavirus
- Rabies Virus
- Bovine Viral Diarrhea Virus (BVDV)
- Pseudorabies
- Bovine Rhinotracheitis
- Feline Leukemia
- Feline Picornavirus
- Canine Distemper Virus
- Avian Influenza A Virus
- Porcine Respiratory & Reproductive Syndrome Virus (PRRSV)
- Kills Pandemic 2009 H1N1 Influenza A virus (formerly called swine flu)

Safety

See material safety data sheet and product label for safety information, handling and proper use.

HMIS

| Health | 3/1 |
| Flammability | 0/0 |
| Reactivity | 0/0 |

Technical Specifications

| Color         | Red |
| Scent         | Floral |
| Appearance    | Clear Liquid |
| pH (concentrate) | 6.00 - 7.00 |
| Non-Volatile Matter | 7.50 - 8.50 |
| Dilution Rate | 1:64 |

Availability

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<tr>
<th>Item</th>
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<tr>
<td>HIL0081689</td>
<td>72 - 1 oz. Packets</td>
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<tr>
<td>HIL0081694</td>
<td>36 - 4 oz. Packets</td>
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<tr>
<td>HIL0081625</td>
<td>4 - 2.5 Liter Containers</td>
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Registrations

EPA Reg. No. 1839-169-1658
Directions For Use

Re-Juv-Nal®

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. This product is not for use on critical and semi-critical medical device surfaces.

DISINFECTANT - To disinfect inanimate, hard non-porous surfaces, add 2 ounces of Re-Juv-Nal per gallon of water. Apply solution with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove excess liquid. For sprayer applications, spray 6-8 inches from surface, rub with brush, sponge or cloth. Do not breathe spray mist. For heavily soiled areas, a pre-cleaning step is required.

BACTERIAL STABILITY OF SOLUTION USE: Tests confirm that Re-Juv-Nal when diluted in hard water up to 400 ppm (as CaCO₃) remains effective against Pseudomonas aeruginosa, Staphylococcus aureus and Salmonella (choleraesuis) enterica for up to 1 month when stored in a sealed container such as a spray bottle at room temperature. If Re-Juv-Nal becomes visibly dirty or contaminated, the use-solution must be discarded and fresh use-solution prepared. Always use clean, properly labeled containers when diluting Re-Juv-Nal. Bactericidal stability of the use-solution does not apply to open containers such as buckets or pails.

To disinfect toilet bowls - Remove gross filth or soils from surfaces with bowl brush. Add 2 ounces of Re-Juv-Nal to the bowl water. Brush or scrub the bowl completely using a scrub brush or toilet mop making sure to get under the rim. Let stand for 10 minutes and flush.

To disinfect food processing premises: Before using Re-Juv-Nal, food products and packaging materials must be removed from the area or carefully protected. For floors, walls, and storage areas, add 2 ounces of Re-Juv-Nal per gallon of water. For heavily soiled areas, a pre-cleaning step is required. Prepare a solution with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove excess liquid. After use, all surfaces in the area must be thoroughly rinsed with potable water.

To disinfect restaurant (food service establishment) food contact surfaces: countertops, appliances, and tables, add 2 ounces of Re-Juv-Nal per gallon of water. For heavily soiled areas, a pre-cleaning step is required. Apply solution with a cloth, sponge or hand pump trigger sprayer so as to wet all surfaces thoroughly. Allow the surface to remain wet for 10 minutes, then remove excess liquid. Diluted product should be applied daily or more frequently with heavy facility use.

**VIROCIDAL ACTIVITY** - Re-Juv-Nal when used on environmental, inanimate, hard, non-porous surfaces exhibits effective virucidal activity against HIV-1, HIV-2, Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Herpes Simplex Type 1 (causative agent of fever blisters), Herpes Simplex Type 2 (genital), Influenza A/Hong Kong, Retrovirus, Human Coronavirus (ATCC VR-740, Strain 229E), SARS Associated Coronavirus, Rabies Virus, Bovine Malignant Catarrhal Fever Virus (BOCVD), Pseudorabies, Bovine Rhinotracheitis, Feline Leukemia, Feline Picornavirus, Canine Distemper Virus, Feline Leukemia, Feline Picornavirus, Canine Distemper Virus, Avian Influenza A Virus, and Porcine Reproductive & Respiratory Syndrome Virus (PRRSV). Kills Pandemic 2009 H1N1 Influenza A virus (formerly called swine flu).

**FUNGICIDAL ACTIVITY** - Re-Juv-Nal® when used on environmental, inanimate, hard, non-porous surfaces exhibits effective fungicidal activity against the listed fungi in water up to 200 ppm hardness (as CaCO₃) in the presence of organic soil (5% BLOOD SERUM). Re-Juv-Nal is an effective fungicide against the listed fungi in water up to 200 ppm hardness (as CaCO₃) in the presence of organic soil (5% BLOOD SERUM). Re-Juv-Nal® when used on environmental, inanimate, hard, non-porous surfaces exhibits effective fungicidal activity against the listed fungi in water up to 200 ppm hardness (as CaCO₃) in the presence of organic soil (5% BLOOD SERUM). Re-Juv-Nal® when used on environmental, inanimate, hard, non-porous surfaces exhibits effective fungicidal activity against the listed fungi in water up to 200 ppm hardness (as CaCO₃) in the presence of organic soil (5% BLOOD SERUM).

**VIRUS** - Re-Juv-Nal is an effective bactericidal and **FUNGICIDE** activity against the listed virus in water up to 200 ppm hardness (as CaCO₃) in the presence of organic soil (5% BLOOD SERUM). Re-Juv-Nal® when used on environmental, inanimate, hard, non-porous surfaces exhibits effective fungicidal activity against the listed fungi in water up to 200 ppm hardness (as CaCO₃) in the presence of organic soil (5% BLOOD SERUM).

**SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV-1, HIV-2, HBV, and HCV OF SURFACES/OBJECTS SOILED WITH BLOOD/BODY FLUIDS** in health care settings (hospitals, nursing homes) or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus Type 1 or Type 2 (HIV-1 or HIV-2) (associated with AIDS), Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV).

**POULTRY AND SWINE PREMISE DISINFECTION**

**Site Preparation:** The first step in any on-going disinfection program must be the removal of gross contamination and debris. This is accomplished by using a shovel, broom, or vacuum, depending on the area to be disinfecting, the efficacy of even the most efficient germicidal cleaner is reduced in the presence of heavy organic matter. Once the heavy debris is eliminated, thoroughly clean all surfaces with soap or detergent and rinse with water.

**Cleaning And Disinfection:** For all general cleaning and disinfection, use 2 ounces of Re-Juv-Nal per gallon of water. Apply Re-Juv-Nal using a cloth, mop, or low pressure coarse sprayer so as to thoroughly wet surfase to be disinfect. Allow to remain wet for 10 minutes and then let dry. For heavily soiled areas, a pre-cleaning step is required. Prepare a fresh solution after each use.

**APPLICATIONS AND USE LIGATION**

Poultry And Swine Premise: Remove all animals and feeds from premises, trucks, cars, coops and crates. Remove all litter, droppings and manure from floors, walls and surfaces of facilities occupied or traversed by animals. Empty all troughs, racks and other feeding and watering apparatus. Thoroughly clean all surfaces with soap or detergent and rinse with water. Use 2 ounces of Re-Juv-Nal per gallon of water. Saturate surfaces with the disinfecting solution for a period of 10 minutes. Ventilate buildings, coops, and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried. Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse. Immers all hoppers, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure.

Hatcheries: Use 2 ounces of Re-Juv-Nal per gallon of water to treat the following hard non-porous surfaces: hatchers, setters, trays, racks, carts, sewing tables, delivery trucks and other hard surfaces. Leave all treated surfaces exposed to disinfectant solution wet for 10 minutes or more. Rinse with potable water before reuse. Then allow to air dry.

Vehicles: Clean all vehicles including mats, crates, cabs, and wheels with high pressure water and Re-Juv-Nal. Use 2 ounces per gallon to treat all vehicles. Leave all treated surfaces exposed to disinfectant solution wet for 10 minutes or more.

Veterinary Practice/Animal Care/Animal Laboratory/Zoo/Pet Shop/Kennels Disinfection Directions: For cleaning and disinfecting the following hard non-porous surfaces: equipment not used for animal food or water, utensils, instruments, cages, kennels, stables, catteries, etc. Remove all animals and food from premises, animal transportation vehicles, crates, etc. Remove all litter, droppings and manure from floors, walls and surfaces occupied or traversed by animals. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use-solution of 2 ounces of Re-Juv-Nal per gallon of water (or equivalent dilution) for a period of 10 minutes. Ventilate buildings and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried.

Disinfection of Barber/Salon Tools Directions: Immers pre-cleaned barber/salon tools (combs, brushes, razors, manicure/pedicure tools, clippers, scissors, trimmer blades) in a use-solution (or equivalent dilution) of 2 ounces of Re-Juv-Nal per gallon of water for at least 10 minutes. Rinse instruments thoroughly before and after a new use. Use-fixture should be prepared daily or more often if the use-fixture becomes visibly dirty.

**NOTE:** Practices may remain immersed until ready to use. Stainless steel shears and instruments must be removed from the use-solution after 10 minutes, rinsed, dried and kept in a clean, non-contaminated receptacle. Prolonged immersion may cause damage to stainless steel or metal instruments.

**DEODORIZATION** - To deodorize, apply Re-Juv-Nal® as indicated under the heading DEODORIZATION.

**MILDEWSTAT**

**NOTE:** To control mold and mildew (Aspergillus niger) and the odor they cause on pre-cleaned, hard, non-porous inanimate surfaces, add 2 ounces of Re-Juv-Nal per gallon of water. Apply solution with a cloth, mop, sponge or hand pump trigger sprayer making sure to wet all surfaces completely. Let air dry. Prepare a fresh solution for each use. Reapply solution at weekly intervals or when mildew growth appears.

To Control Mold and Mildew on Large, Inflatable, Non-Porous Plastic and Rubber Structures (animals, promotional items, moonwalks, slides, obstacle course play equipment, exercise equipment, and wrestling, gym, and other large surfaces traversed by animals, equipment, vehicles and vehicles, animals, transportation vehicles, crates, etc.): Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use-solution of 8 ounces of Re-Juv-Nal per gallon of water (2 ounces per gallon of water) (800 ppm active quaternary) (or equivalent dilution) for a period of 10 minutes. Ventilate buildings and other closed spaces. Do not use equipment until treatment has been absorbed, set or dried.