

VITAL OXIDE

Vital Oxide is an EPA registered disinfectant cleaner, mold killer and super effective odor eliminator. Ready to use with no mixing required, just spray, wipe or fog right from the bottle. Non-irritating to the skin and non-corrosive to treated articles.



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THE IDEAL DISINFECTANT

Eliminates SARS-CoV (COVID-19)

 Listed on US EPA List N: Disinfectants for use against SARS-CoV-2, the cause of Covid-19.

FOOD CONTACT SANITIZER - NSF Registered (D2) Sanitizer

 Kills 99.999% of bacteria, including eColi, Salmonella, and Listeria in less than 60 seconds, and it's odorless, requires no rinse and doesn't alter the taste of food that has been prepared on sanitized surfaces.

EPA REGISTERED DISINFECTANT

 Contains no volatile organic compounds (VOCs) and kills a wide range of viruses such as Noro Virus, Feline and Canine coronavirus and bacteria. It doesn't contribute to mutating super bugs.

ALLERGEN ELIMINATOR

 Proven effective on pet dander, as well as dust mites and cockroach allergen. Safe to use on pet bedding and sleeping areas.

MOLD AND MILDEW KILLER

Inhibits & keeps mold and mildew from growing for up to 4 weeks.

ODOR ELIMINATOR

Eliminates malodors due to smoke, trash, septic systems, stale cooking and more, without using masking agents. Neutralizes urine and fecal odors.

HVAC AND AIR DUCTS

 Vital Oxide can be used for antimicrobial control in HVAC systems and air ducts, including odor causing bacteria, mold fungus and odorcausing fungi.

SOFT SURFACE SANITIZER

Vital Oxide is a proven sanitizer on soft surfaces by spot treatment. Use on upholstery, curtains and auto interiors. Not intended for use on clothing.

Product Information

Part No.	Size	Gross weight	Dimensions (L x W x H) inches	Ship UPS
8.639-558.0	4 x 1 gal	36 lb.	16 x 9 x 12	Yes
8.639-560.0	6 x 1 qts	15 lb.	14 x 10 x 6	Yes
8.698-112.0	55 gal	585 lb.	23.5 x 23.5 x35	Yes

633 N Helena St. Spokane, WA 99202 **(509) 535-1555** info@northstardirect.com



1210 N Oregon Ave. Pasco, WA 99301 (509) 547-2323 info@northstarhotsy.com

VITAL OXIDE - PROVEN TO WORK ON ALL SURFACES

EDUCATION

- Schools & Daycare Facilities
- Gyms & Locker Rooms
- Cafeteria Tables
- Sports Equipment

FOOD PROCESSING

- **Refrigerated Storage Units**
- Food Transport Trucks

HEALTH CARE

- Nursing Homes
- **Physical Therapy Facilities**
- Pharmacies
- Ambulances

MISCELLANEOUS

Sports Gear

- Barber Shops/Hair Salons
- **Buses, Trains & Planes**
- Laboratories

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- Restaurants
- **Boats/Ships**

VETERINARY

- **Animal Kennels**
- **Examination Rooms**
- Equipment
- Surgery Rooms

AGRICULTURE

- **Animal Pens**
- **Egg Processing Facilities**

PRODUCT DETAILS

VitalOxide

One part stable Chlorine

- **Dioxide Formula**
- Very effective
- No mixing

EPA Category 4 - low toxicity

- No smell formula
- No Personal protective equipment required

Strike 5 log for TB

- Staph
- Streph
- Ecoli
- Salmonella
- Listeria
- MRSA
- **Tuberculosis**

Eliminates Viruses

- Parvo
- Distemper
- Kennel Cough 10
- SARS-CoV-2, the cause of Covid-19
- Canine coronavirus
- Feline coronavirus

Foam Capability

- Fast application, dwell time
- Reduce water and product usage

Non-corrosive and non-irritating to skin

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Animal Transport Vehicles

Certifications

NSF Registered (D2) Sanitizer

Hypo Allergenic, Non-irritating to Skin, Non-corrosive

USEPA Registered #82972-1 in all 50 States & Puerto Rico. USEPA Category 4 Toxicity - Safest

Technical Data

Color: Clear

- Scent: Mild
- pH: 8.0 9.0
- Solubility in Water: 100%

pH Balanced: 8.5







Disinfectant Sanitizer for Animal Care Facilities



VitalOxide is an EPA registered disinfectant cleaner, mold killer and super effective odor eliminator. Ready to use with no mixing required, just spray, wipe or fog right from the bottle. Non-irritating to the skin and non-corrosive to treated articles.

Product Application Guidelines

MICROORGANISMS KILL LIST

CANINE:

- Canine Distemper Virus, Strain Snyder Hill, ATCC VR
- Canine Parvovirus, Strain Cornell-780916, ATCC VR-2016
- Canine adenovirus 1, Strain Utrecht, ATCC VR-293
- Canine coronavirus Strain 1-71, ATCC VR-809
 Rabies Virus, Strain: Flury (HEP), ATCC VR-139
- Rables Virus, Strain: Flury (HEP), ATCC VR-139
 Canine Influenza (H3N8) virus, Strain A/Ca/NY/105913/08, Cornell University
- Bordetella bronchisepticaATCC 10580, Rotavirus, Strain WA

FELINE:

- Feline Herpsvirus 1 Strain C-27, ATCC VR-636
- Feline coronavirus, Strain WSU 79-1683, ATCC VR 989
- Feline Infectious Peritonitis Virus, Strain: WSU 79, ATCC VR-990
- Feline panleukopenia virus, Strain Philips-Roxane, ATCC VR-648
- Feline Herpsvirus 1 Strain C-27, ATCC VR-636
- Rabies Virus, Strain: Flury (HEP), ATCC VR-139
- Bordetella bronchisepticaATCC 10580, Rotavirus, Strain WA

OTHER:

- Hantavirus (Prospect Hill Virus) University of Ontario
- Avian Influenza(H5N1) Virus (NIBRG-14), CDC #2006719965, Charles River Laboratories
- Porcine Epidemic Diarrhea Virus, Strain CO 2013, USDA APHIS 025-PDV001

RECOMMENDED EQUIPMENT

Note: Normal application does NOT require PPE equipment.

- . Miarofibar a
- Microfiber clothsSpravers
- 32 oz spray bottles
- Safety eye protection
- Use a respirator if spraying with a micron reducing device.

Directions for Use

DISINFECTION OF ANIMAL QUARTERS AND KENNELS:

For disinfection of pre-cleaned animal quarters and kennels, apply VitalOxide undiluted.

- 1. Remove all animals and feed from premises.
- 2. Remove all litter and droppings from floors, walls and surfaces of facilities occupied or traversed by animals.
- 3. Empty all troughs, racks, and other feeding and watering appliances.
- 4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
- 5. Saturate the surfaces with the undiluted disinfecting solution for contact time of 10 minutes.
- Ventilate building and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried.

TO CLEAN AND DISINFECT IN A VETERINARY APPLICATION:

Use to clean and disinfect hard, nonporous surfaces such as feeding and watering equipment, cages, utensils, instruments, kennels, stables, catteries, etc. Remove all animals and feed from premises, animal transportation vehicles, crates, etc. Remove all litter, droppings, and manure from walls, floors, and surfaces of facilities occupied or traversed by animals. Empty all feeding and watering equipment. Pre-clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with this product undiluted and let stand for 10 minutes. To kill mold and fungi, let stand for 10

minutes at room temperature. Ventilate buildings and other closed spaces.

VEHICLES TRANSPORTING ANIMAL FEED, ANIMAL FOOD, PET FOOD:

VitalOxide can be used as a part of a FSMA regulations sanitary transportation practices for transporting human and animal food for sanitizing/disinfecting hard non-porous surfaces. Product to be used by shipper, receiver, loader or carriers transporting human and animal food on Transportation equipment includes bulk and non-bulk containers, bins, totes, pallets, pumps, fittings, hoses, gaskets, partitions, loading systems, and unloading systems. For disinfection allow surface to remain wet for 10 mins for sanitization 5 mins.

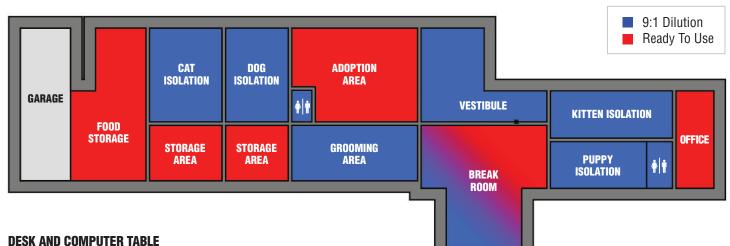
REPTILE TANK CLEANING AND DISINFECTION DIRECTIONS:

Remove all reptiles from the enclosure (tank) prior to cleaning and disinfecting. Remove all litter or drippings from surfaces. Empty all equipment used for feeding or watering reptiles. Thoroughly clean all surfaces with soap or detergent and rinse with water. Apply VitalOxide undiluted to the surfaces of the enclosure (tank) until thoroughly wet. Allow surfaces to remain wet for 10 minutes. Allow the enclosure (tank) to ventilate for a minimum of 10-15 minutes before replacing the reptiles

Note: Do not apply this product directly onto the reptile. If this product comes into contact with the reptile's skin, then immediately wash the material off of the animal with lukewarm water. If the reptile ingests this product, contact your veterinarian immediately.



Areas of Use



Sanitize using the 9:1 dilution.

- Bacommand tools: Microfiber alot
- Recommend tools: Microfiber cloth and 32 oz spray bottle.
- Pre clean required. Remove any visible dirt from surface. Spray and wipe until visibly clean. Allow to air dry.

PET TOYS

- Disinfection at full strength
- · Recommend tools: Microfiber cloth and 32 oz spray bottle.
- Spray and wipe until visibly clean. Toys can be claned by spraying individually with no dilution. Allow to air dry.

WORK TABLES

- Disinfection at full strength
- Recommend tools: Microfiber cloth and 32 oz spray bottle.
- Pre clean required. Remove any visible dirt from surface. Spray and wipe until visibly clean on all areas of the tables and kid work areas like table surface and legs. Allow to air dry.

FLOORS

- Disinfection at full strength
- · Recommend tools: Microfiber cloth and 32 oz spray bottle.
- Scrub and clean floors. Remove any visible dirt or fluid from the surface
 of the floor following regular cleaning procedures. Apply VitalOxide full
 strength covering the floor area. Allow to air dry.

PET CAGES, KENNELS AND ISOLATION AREAS

- Disinfection at full strength
- Recommend tools: Microfiber cloth and 32 oz spray bottle.
- Scrub and cleansurfaces. Remove any visible dirt or fluid from surfaces and floor following regular cleaning procedures. Apply VitalOxide full strength covering the floor area. Allow to air dry.

WINDOWS

- Sanitize using the 9:1 dilution.
- · Recommend tools: Microfiber cloth and 32 oz spray bottle.
- Pre clean required. Remove any visible dirt from surface. Spray and wipe until visibly clean. Allow to air dry.

DOOR KNOBS AND CABINET HANDLES

- Disinfection at full strength
- Recommend tools: Microfiber cloth and 32 oz spray bottle.
- Pre clean required. Remove any visible dirt from surface. Spray and wipe until visibly clean. Allow to air dry.

HEAVY DUTY ODOR CONTROL

- Disinfection at full strength
- Pre-clean area. Make sure product comes incontact with source of odor. Saturate area with product. Allow to air dry.



Contact your local Dealer for more information:

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Specifications & product descriptions subject to change without notice.

VitalOxid

Available in 4x1-gallon, 6x1-quart, 15-gallon or 55-gallon drums

Buy Bulk For Cost Savings! Ask your Distributor how you can arrange to have VitalOxide supplied on a regular monthly schedule.We deliver... it's convenient, dependable and efficient.



Testing Summary

Disinfection	Use Method	Contact Time	Study Conclusion
Gram Negative Bacteria			
Acinetobacter baumannii ATCC 19606	AOAC Use-Dilution	10 min.	Disinfection
Pseudomonas aeruginosa ATCC 15442	AOAC Use-Dilution	10 min.	Disinfection
Legionella pneumophila ATCC 33153	AOAC Use-Dilution	10 min.	Disinfection
Salmonella enterica ATCC 10708	AOAC Use-Dilution	10 min.	Disinfection
Klebsiella pneumoniae (NDM-1) ATCC BAA-2146	AOAC Use-Dilution	10 min.	Disinfection
Escherichia coli ATCC 11229	AOAC Use-Dilution	10 min.	Disinfection
Bordetella bronchiseptica ATCC 10580	AOAC Use-Dilution	10 min.	Disinfection
Chlamydia psittaci, Strain 6BC, ATCCVR-125	AOAC Use-Dilution	10 min.	Disinfection
Gram Positive Bacteria	_		
Staphylococcus aureus MRSA ATCC 33592	AOAC Use-Dilution	10 min.	Disinfection
Staphylococcus aureus ATCC 6538	AOAC Use-Dilution	10 min.	Disinfection
Listeria monocytogenes ATCC 15313	AOAC Use-Dilution	10 min.	Disinfection
Mycobacterium bovis- BCG	AOAC Use-Dilution	10 min.	Disinfection
Penicillin- Resistant Streptococuspenumoniae, ATCC 700677	AOAC Use-Dilution	10 min.	Disinfection
Enveloped Viruses	Use Method	Contact Time	Study Conclusion
Swine Influenza (H1N1) Virus**	Virucidal Efficacy	5 min.	Complete inactivation
Respiratory Syncytial Virus**	Virucidal Efficacy	5 min.	Complete inactivation
Influenza B Virus**	Virucidal Efficacy	5 min.	Complete inactivation

Virucidal Efficacy	5 min.	Complete inactivation
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Virucidal Efficacy	10 min.	Complete inactivation
Use Method	Contact Time	Study Conclusion
Virucidal Efficacy	5 min.	Complete inactivation
Virucidal Efficacy	5 min.	Complete inactivation
Virucidal Efficacy	5 min.	Complete inactivation
Virucidal Efficacy Virucidal Efficacy	5 min. 10 min.	Complete inactivation Complete inactivation
		·
	Virucidal Efficacy Virucidal Efficacy Use Method	Image: constraint of the sector of the sec

Feline panleukopenia virus, Strain Philip	os-Roxane, ATCC VR-648**	Virucidal Efficacy	10 min.	Complete inactivation
Food Contact Sanitizer	Dilution Rate: 9:1	Use Method	Contact Time	Study Conclusion
Escherichia c oli ATCC 11229		AOAC Food Contact Sanitization	60 sec.	99.999 Kill (no rinse required)
Staphylococcus aureus ATCC 33592		AOAC Food Contact Sanitization	60 sec.	99.999 Kill (no rinse required)
Carpet Sanitizer	Dilution Rate: 5:1	Use Method	Contact Time	Study Conclusion
Staphylococcus aureus ATCC 6538		DIS/TSS-8 Carpet Sanitizer	60 min.	99.9 Carpet Sanitizer
Enterbacter aerogenes ATCC 13048		DIS/TSS-8 Carpet Sanitizer	60 min.	99.9 Carpet Sanitizer
Soft Surface Sanitizer		Use Method	Contact Time	Study Conclusion
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Staphylococcus aureus ATCC 6538		Soft Surface Sanitization	5 min.	Sanitization
Staphylococcus aureus ATCC 6538		Soft Surface Sanitization	5 min.	Sanitization
Staphylococcus aureus ATCC 6538 Enterbacter aerogenes ATCC 13048		Soft Surface Sanitization	5 min. 5 min.	Sanitization
Staphylococcus aureus ATCC 6538 Enterbacter aerogenes ATCC 13048 Fungi on Surface		Soft Surface Sanitization Soft Surface Sanitization Use Method	5 min. 5 min. Contact Time	Sanitization Sanitization Study Conclusion

Not EPA approved organisms

Stachybotrus Chartarum	Sporicidal Viability	10 min.	No germination of spores
Aspergillus Fumigatus	Sporicidal Viability	10 min.	No germination of spores
Alternaria Alternata	Sporicidal Viability	10 min.	No germination of spores
Penicillum sp	Sporicidal Viability	10 min.	No germination of spores

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