Oxygen Antibacterial Powder MSDS

(Material Safety Data Sheet)

Oxygen is an inorganic antimicrobial, antibacterial, anti mold and mildew formulation developed by Creative Oxygen Labs Ltd. This patent pending formulation that comes in the form of a 60-gram pouch ideal for one gallon of paint has been tested and approved by both US and Canadian microbiology and decease control centers in accordance with ISO 22196 standard protocol and ISO 16000-23.

Oxygen is powered by silver-ion carriers and zinc-based oxides infused with natural crystalline compounds in porous carriers that make it highly effective and long lasting in comparison to other solutions on the market.

Part I: Product & Ingredient Minerals:

Oxygen comes in a white powder form with photocatalytic and antibacterial features and benefits that make up 100% of the formulation:

These minerals include:

1. Silver
2. Zirconium Phosphate
3. Zinc Oxide
4. Silica
5. Calcium Carbonate

Part II: Risk Identification

Risk Type:	The ingredients used in Oxygen formulation are made of smart earth minerals. The transport and use of this product is with little to no risk if handled properly.
Health Hazard:	Inhalation and intake of Oxygen formulation and its ingredients are harmless to the human body and causes no irritation. No reports of poisoning by the Oxygen formulation and of its ingredients have been reportedly known till now by industry standards.

Environment Hazard:	Oxygen formulation and its ingredients are inorganic earth minerals and harmless to the environment.
Explosive Danger:	This product is not ignitable.

Part III: First-aid Measures

Skin Contact:	In the unlikely event that a sensitivity to the skin occurs take off contaminated clothing, then wash body part with flowing water.
Eye Contact:	In the unlikely event that a sensitivity to the eyes occurs, immediately lift eyelid, and wash with flowing water or saline. Then see the doctor.
Inhalation:	In the unlikely event that discomfort occurs to breathing in excess dust particles rapidly leave the site for fresh air. Keep airway clear. Give oxygen in case of dyspnea, and give artificial respiration if respiratory arrest, then see doctor.
Ingestion:	In the unlikely event that discomfort occurs in the event of ingestion, drink plenty of water to vomit, then see doctor.

Part IV: Fire Protection

Hazard Property:	The Oxygen Formulation does not self-ignite or dissolve at high temperature. It is also non combustible.

Part V: Clean Workspace

To maintain a clean workspace, it is highly recommended that floors are swept to avoid inhalation of dust particles. Cleaning personnel are recommended to wear dustproof mask and general work cloths.

Part VI: Operation Instruction and Storage

Having ventilation in closed space to avoid dust is highly recommended. Operating staff should receive specialized training and abide by operation rules when mixing the formulation with paint or other materials. Operating staff are recommended to wear self-contained dust-proof respirators for added safety if sensitive to dust particles. Additional safety measures include safety goggles and rubber gloves.

Storage: Store in shady, cool and ventilate warehouse with sealed packing.

Part VII: Contact Control / Individual Protection

Engineering Control:	Operate in closed space with local ventilation.
Respiratory protection:	When the dust concentration in air exceeds, please wear self-contained dust-proof respirators.
Eye Protection:	Wear safety chemical goggles.
Body Protection:	Wear appropriate protective clothing.
Hand Protection:	Wear appropriate protective gloves.
Other Protection:	Keep cleanliness and personal hygiene.

Part VIII: Physicochemical Properties

Ingredients:	Oxygen is formulated with 5 inorganic minerals
Appearance:	Odorless and colorless white powder.
pH:	7-8
Melting Point (℃):	1300C
Boiling Point (℃):	No data.
Relative Density (water=1):	No data.
Relative Vapor Density(air=1):	No data.
Saturated Vapor Pressure (kPa):	No data.
Heat of Combustion (kJ/mol):	Insignificant
Critical temperature (℃):	Insignificant
Critical Pressure (MPa):	Insignificant
Flash Point (℃):	Insignificant
Ignition Temperature (℃):	Insignificant
Upper Explosive Limit %(V/V):	Insignificant

Lower Explosive Limit %(V/V): Insignificant

Solubility:	Insoluble in water, ethanol, and HC.
Main Application:	Anti-bacterial and antipollution additives for functional materials such as acrylic paints, varnish, ceramic, PVC flooring, glue, and other coatings.

Other Physicochemical Properties:

Average particle diameter	D50≤10.0μm D50 ≤10.0μm
Stability and Reactivity:	Stable and does not dissolve after heated 1300℃＋ 1300℃
Prohibited Matches:	No known incompatibility.

Part IX: Toxicity Acute

Toxicity:	LD50：＞5000 mg/kg, LC50：

Subacute & Chronic Toxicity Non-toxic

Irritation:	NO
Sensitization:	NO
Mutagenicity: Teratogenicity:	NO
Carcinogenicity:	NO

Part X: Ecology

Ecotoxicity:	No influence on environment.
Biodegradability:	Non-biodegradable.
Non-biodegradable:	No data
Bio-concentration:	No data

Other Deleterious Effect:	No data

Part XI: Disposal

Nature of Waste:	No data
Disposal Method:	Dispose under regulation of the country or local authority.

Part XII: Transportation

Hazard:	Non-Hazardous
Packing Mark:	Under the Creative Oxygen Labs Ltd. Brand
Packing Method:	60gram pouch per unit that comes in 40-unit boxes / 2400grams per box.

Transportation regulation:

We hereby certify that all consignments shipped and delivered by Creative Oxygen Labs Ltd. are not classified as dangerous under the current edition of IATA DGR 64 and EPA rules and therefore the company's inorganic formulation can be shipped by sea, land and air, worldwide.

Transportation Notice: Packing should be intact and loading stable at delivery. During transportation, container should be guaranteed without leakage, falling, dropping or damage, and no exposure to sun, rain, or high temperature. Vehicle should be thoroughly cleaned after transportation. Specified route should be applied while road transportation.

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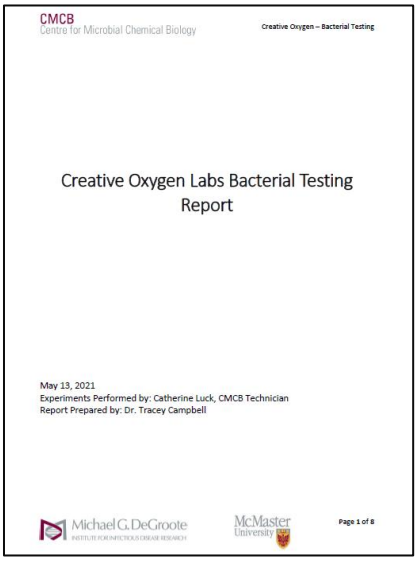
Part XIII: Lab Test Results

Oxygen's antibacterial lab tests have been conducted by **McMasters Microbiology and Disease Control Center** in Canada and The **City College of New York School of Medicine department of molecular cellular and biomedical sciences** in the United States. The test results conclude Oxygens antibacterial effectiveness with 99.9% kill rate using the Kerby Boer method under ISO 22196 protocol.


CMCB
Centre for Microbial Chemical Biology
Creative Oxygen – Bacterial Testing

Creative Oxygen Labs Bacterial Testing Report

May 13, 2021
Experiments Performed by: Catherine Luck, CMCB Technician
Report Prepared by: Dr. Tracey Campbell

Michael G. DeGroote INSTITUTE FOR INFECTIOUS DISEASE RESEARCH
McMaster University
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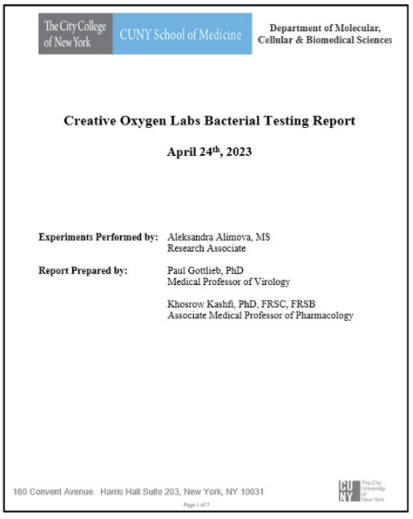
Oxygens formulation when mixed with architectural products and finishes inhibit airborne bacteria, mold and contaminant growth for up to 10 years. Oxygens powder-based formula is resistant towards both gram-positive and gram-negative bacteria having been tested against staphylococcus aureus (gram positive) MRSA, Escherichia Coli, Klebsiella Pneumoniae, and Pseudomonas Aeruginosa (gram negative).


The City College of New York
CUNY School of Medicine
Department of Molecular, Cellular & Biomedical Sciences

Creative Oxygen Labs Bacterial Testing Report

April 24th, 2023

Experiments Performed by: Aleksandra Alimova, MS
Research Associate

Report Prepared by: Paul Gottlieb, PhD
Medical Professor of Virology

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Amount Required for Effectiveness.

The MBC (minimum bacterial concentration) for Oxygen is between 1.25% to 1.5% of total quantity mixed in acrylic liquids such as paints, varnish, wallpaper, and glue, between 2.5% to 3% on ceramic tiles and plastic pipes and 5% to 8% in cement and concrete.

Test surfaces – Preparation of coating test panels

Oxygen has been tested on:

- Acrylic paint
- Acrylic varnish
- Ceramic tiles
- Wooden tiles
- Plastic pipes
- Wallpaper

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The Oxygen Additive

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Ingredient List

Oxygen is powered by silver-ion carriers and zinc-based oxides infused with natural crystalline compounds. Two of the most powerful earth minerals recognized for their scientifically proven, peer reviewed and 3rd party lab tested antibacterial, anti-mold, anti-pollution, anti dust mite, and anti-odor benefits.

How to use Oxygen

Add 60-gram pouch to 1 gallon of acrylic or latex paint and or varnish. (covers approx. 400 sq/ft of surface space)

Mix for 3 to 4 minutes until fully dispersed. Avoid clumps and air bubbles.

Apply as a final top coat on walls, ceilings or wooden trims using a soft roller or brush.

Features

- Made with 100% natural ingredients
- Eco-safe formulation with ZERO VOCs
- One feature wall or ceiling creates clean air flow for every 100 sq/ft
- Can be mixed with ALL acrylic or latex paint brands and soft pastel colors
- Keeps surfaces clean by neutralizing bacteria, pollution and mold growth

Benefits

- Keeps AIR fresh 24/7
- No filter or power required to operate
- Supports better indoor living
- Reduces bad odor and funky smells
- Keeps coated surfaces clean for up to 10 years

Oxygen is suitable for living spaces such as kitchens, bedrooms, living rooms, and children's play area. It's great for office worker productivity and alertness in spaces such as boardrooms, call centers and now work from homes spaces. And its great for daycare centers, schools, hospitals, clinics, restaurants, gyms, hotel rooms and other indoor spaces where cleanliness and quality of air is a priority.