

Waterbody

OXYSORB[™] Granules

OXYSORB[™]

The Green Revolution

The **Green Revolution** refers to a new research that increase water production and agricultural production worldwide.

OXYSORB[™] by Watch-Water is the "Product of the Green Revolution" that will save over a billion people from starvation. Water with eutrophication, phosphorus, nitrogen and algae can be now used for drinking and agriculture. We call it green revolution.

Let's Stop Eutrophication



What is green infrastructure?

- ✓ Improve water quality
- ✓ Reduce hydrant overloading
- ✓ Reduce heavy metals
- ✓ Reduce volatile organic compounds
- ✓ Reduce nutrients like nitrogen and phosphorus

Product

OXY (Oxygen Release), SORB (an Adsorber) is a proprietary formulation of Watch-Water Germany. **OXYSORB[™]** granules in water produce a controlled release of Active Oxygen for periods of up to one whole year on a single application. The core of granules **OXYSORB[™]** is a non-hazardous, food grade adsorber to bind and scavenge grade Phosphate, Nitrates, Hydrogen sulfide including (TOC₃) Toxic organic compounds. Watch-Water's **OXYSORB[™]** has another name "magic bullet" solution in a single dosing oxidation and adsorption. **OXYSORB[™]** technology and the process work to destroy contaminants in just a short period of time.

Purpose/Applications

Watch-Water's purpose is to remove contaminants from water, on a Earth's planet's surface. These applications often refer to:

- Oceans, seas, lakes
- Ponds, wetlands
- Rivers, streams, canals,
- Reservoirs, basin, aquifers
- Harbor, lagoons
- Water as well as for water reuse
- Surface and ground waters

Water pollution affects the entire biosphere-plants and organisms living in these **bodies of water**.

Algae Problems and Facts

What are blue-green algae?

Blue-green algae (also known as cyanobacteria) are common and natural to our waters and found throughout Vermont. Cyanobacteria thrive in nutrient rich water and can multiply rapidly to form blooms and scum, particularly during the warm days of summer and early fall.

A blue-green algae bloom:

- Resembles thick "pea soup".
- Looks like "spilled paint" on the water's surface.
- Creates a thick mat of foam along the shoreline.
- Is generally green or blue-green in color, although it can be brown, purple or white.
- Is made up of small specks or blobs floating at or just below the water surface.

A blue-green algae bloom is NOT:

- Stringy, made up of long bright grass-green strands that feel either slimy or cottony. This is harmless green algae.
- Mustard yellow in color. This probably is pollen. For a photo gallery of what is and is not a blue-green algae bloom

Find out more on this US Govt. Website:

http://healthvermont.gov/enviro/bg_algae/photos.aspx

What are the health effects?

General health effects caused by exposure to blue-green algae:

- Rashes or other skin irritations.
- Allergy-like reactions, runny nose or sore throat.

Some blue-green algae naturally produce toxins or poisons. When these toxins are ingested in large amounts they can cause:

- Sharp, severe stomach problems like diarrhea and vomiting.
- Liver damage that may take hours or days to show up in people or animals.
- Numb limbs, tingling fingers and toes or dizziness.

Possible health effects of animal exposure to a toxic bloom:

- Weakness, staggering
- Difficulty breathing
- Convulsions
- Vomiting or diarrhea

Signs of a toxic bloom may include: a large number of dead fish, waterfowl or other animals, or sudden, unexplained sickness or death of a cat or dog that has been exposed. It is not possible to tell if cyanobacteria are toxic by looking at them.

Why OXYSORB™?

Answer: Only because of **eutrophication**.

Eutrophication and algae blooms in the frequent outbreak have become a major **environmental problem** facing the world.

Outbreaks of algae blooms in the agriculture, tourism landscape, drinking water have a serious impact. Watching these problems, it has shown that an outbreak of **Cyanobacteria** control 80% produce toxins, and these toxins

can go directly to the source of drinking water and harm human health, but also in the aquatic food chain (fish, shrimps and so on) through water enriched products, thus directly or indirectly threaten human health. **OXYSORB™** is the most efficient, simple, **environment friendly**, low cost method to adsorb nitrogen and phosphorus and stop algae blooms and all the current problems are solved

— BlueWaterpapers.com

OXYSORB™ is Life for Water

Water
Technology
& Chemicals

*Using OXYSORB™ in lakes, ponds, rivers, reservoirs and wastewater will immediately reduce **Geosmins, Trihalomethanes, Chloramines, Phosphates, Nitrates** and improve taste and odor from water reservoirs!*

Odor Removal:

The most common problem is a lack of dissolved **Oxygen** which kills fish and increases the amount of coliform bacteria and Naegleria ("brain-eating amoeba"). the cause of these problems in **nutrient_overloading** or **eutrophication**. The process by which a body of water acquires a high concentration of nutrients, especially **phosphates** and **nitrates**. These typically promote excessive growth of **algae**. As the algae die and decompose, high level of **organic** matter and the decomposing **organisms** deplete the water of available **oxygen**, causing the death of other organisms, such as **fish**. **Eutrophication** is a natural, slow aging process of a **water body** but **OXYSORB™** as a **water body** greatly speeds up the process to produce a high amount of **oxygen** and adsorbs all bad phosphates and nitrates. Increasing oxygen throughout the

water system allows us to start a sequence of events that provides (1) **aquatic weed control**, (2) improves water quality, (3) reduces Geosmins, Trihalomethanes and Chloramines, (4) reduces organic muck and harmful gases (like H_2S), (5) kills coliform bacteria, (6) removes phosphates and nitrates and stop **Nuisance Algae Growth** and you will **watch water** is clear and at the same time fishes (and other aquatic life form) are healthy and the improved water quality provides safer swimming conditions by reduce organics.

OXYSORB™ delivers cost effective solutions for ponds and lakes by oxygenating the lower parts of artificial or natural lakes/ponds, as well as wastewater and effluent. Only **OXYSORB™** can provide real oxygen with function of adsorption of harmful substances over a long period of time.

page
3

OXYSORB™ brings life to the Water

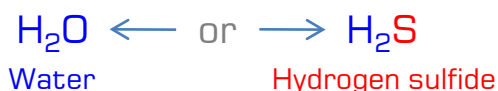


Importance of OXYSORB™

Life in water

OXYSORB™ is the most important product for keeping all the waters safe and non-toxic.

OXYSORB™ is life for all waters no matter where the water is – why? Read carefully Oxygen is the most important constituent of waterbody health.



Without oxygen at the bottom of the water body, anaerobic bacteria (that live without oxygen) produces acids. These acids not only increase acidity but also causes a **MASSIVE** release of **Phosphorous** and **Nitrogen**, the two major fertilizers form the organic sediment into the water column. At the same time this anaerobic bacteria put toxic gases in the water including Hydrogen Sulfide (H₂S, which is very toxic even at 0.01 mg/L with rotten egg smell), ammonia, carbon dioxide and methane. TOC = Toxic Organic Compounds are toxic to all life forms including fishes, **beneficial bacteria**, and insects. Only **OXYSORB™** can speed **aerobic bacteria**, support healthy fish, increases total oxygen content which gives water plants to adsorb nutrients and use them more efficiently. Any other method of increasing dissolved oxygen are useless and unsatisfactory because of requirement of excessive agitation which move nutrients to the surface encouraging more Algae growth- or because they do not ensure sufficient oxygenation.

Importance of OXYSORB™

It adsorbs up to 99% of phosphorus and nitrogen in the bottom section of the water body where it becomes food for beneficial muck consuming bacteria and insects. The insects then become one of the best foods for fishes, improving healthy fish growth.

Water pH stays around 7.6 all the time when treated with **OXYSORB™**.

Technical Data

OXYSORB™ is a fine Ion-Exchange capable, yellowish and odorless granules, which is slightly soluble in water. Oxyperoxide exchange shows a very high adsorption of phosphates and nitrate stability

Contents

Compositions	unit	value
Oxyperoxide	(w/w)	75%
Available oxygen	(w/w)	20%
Adsorption granular	(w/w)	5%
Moisture	(w/w)	0%
pH ₁ (0.05%) - application	-	7.5
pH ₂ (1%)	-	11.5

Package

OXYSORB™ is available in standard Watch Water packaging 60 kg Drums with PE inliner.

Storage:

Packed **OXYSORB™** should be stored in the original packaging unit, in a cool ventilated area where packages are protected from direct sunlight. Under these conditions the recommended shelf-life is 2 years.

Other Applications:

Agriculture:	Soil treatment
Oil & Grease trap :	Sulfide removal
Ground water pumps:	Scale removal

Water pH for life
OXYSORB™ for life

Now is the best time to start with **OXYSORB™**

Manufactured by:

WATCHER
WATCH WATER
a Water Company

Address: Fahrlichstraße 14
Mannheim, D-68165, Germany
Tel: +49 621 87951-0
Fax: +49 621 87951-99
Email: info@watchwater.de