

O-SOX™

Easiest Downwell Deployment of Dissolved Oxygen

Affordable and effective oxygen-releasing socks for stimulating aerobic biodegradation in ground water wells.

Applications:

Stimulation of aerobic biodegradation of groundwater contaminants using EHC-O™. EHC-O is deployed in remediation wells with the O-SOX™ delivery system.

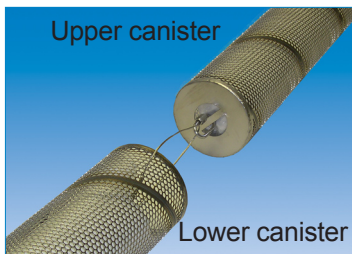
EHC-O is a proprietary field-proven compound that contains a long-term source of dissolved oxygen and nutrients. In the well, EHC-O reacts with water to release oxygen slowly. If necessary, exhausted socks may be replaced with new ones to continue treatment.

Organic constituents amenable to aerobic biodegradation processes are:

- Petroleum Hydrocarbons
- Light polycyclic aromatic hydrocarbons (PAHs)
- BTEX

Benefits of EHC-O™

- ❖ Significant cost savings realized through the use of EHC-O due to its higher oxygen release rate and lower price.
- ❖ Contains nutrients. pH-buffered to reduce self-encapsulation.
- ❖ Estimated longevity of 3 to 6 months.



Detail showing how two canisters are linked. Up to three canisters may be suspended in line to lengthen the active zone.



Detail showing the 4-in sock protruding slightly from the top of the canister.



Benefits of O-SOX™ Delivery System

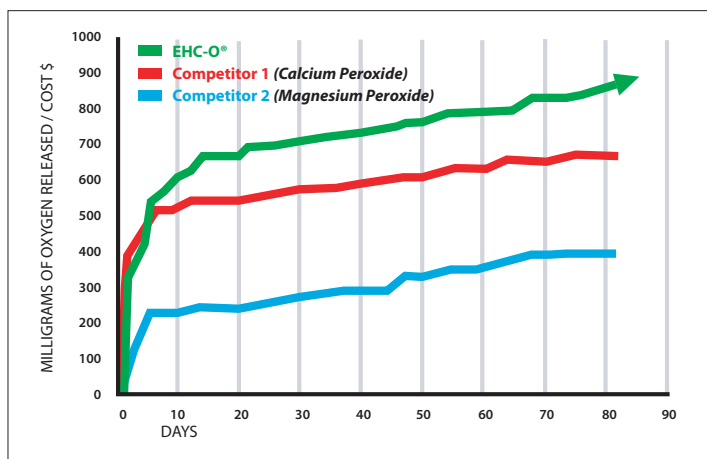
- ❖ All the field proven benefits of EHC-O.
- ❖ Substantial time savings in the field because the reusable stainless steel canisters are easy to insert in and retrieve from the well compared to other methods. Recover the cost of the canister in your first installation!
- ❖ Ease of determining the exact depth at which the product is deployed.
- ❖ Socks and canisters available for 2" and 4" wells.
- ❖ Up to three canisters may be suspended in line to lengthen the active zone.
- ❖ Even distribution of the active material over the length of the canister(s) because the socks do not collapse or bunch up.





OXYGEN-RELEASING SOCKS

Comparative Rates of Oxygen Delivery and Costs



EHC-O™ O-Sox™ FAQs

- What are the main differences between O-Sox and comparable market alternatives?** EHC-O O-Sox contain a well-buffered source of controlled release oxygen plus inorganic nutrients (mainly nitrogen) that can accelerate the biodegradation of various organic compounds and enhance certain natural attenuation processes. In addition, the O-Sox technology is a superbly well designed stainless steel canister and sleeve system which greatly simplifies installation, removal and replacement.
- Do I need microbial inoculants?** In most cases, the naturally occurring (indigenous) microorganisms are well adapted to the organic constituents of interest and inoculants are not required.
- What contaminants are amenable to O-Sox treatment?** The rate and extent of removal of all organic compounds that are biodegraded under aerobic conditions are usually enhanced via the addition of oxygen and inorganic nutrients. Petroleum-based aromatic (e.g., benzene, toluene, xylene, phenol) and aliphatic hydrocarbon mixtures (e.g., gasoline, heating oil, Diesel fuel, jet fuel, kerosene) are primarily targets; lightly chlorinated ethenes (vinyl chloride), MTBE, dioxane, pentachlorophenol, and many other compounds are also potentially amenable to O-Sox treatment.
- How much do they cost?** O-Sox cost about 25% less than market alternatives.
- Why should I use the O-Sox technology?** It's a better product. And the superior design and ease of application will immediately translate into greatly reduced field time and frustration = reduced project cost.
- Is it easy to switch over to the O-Sox technology?** Yes. EHC-O has been accepted by many state regulatory authorities and it has been employed throughout the USA and Europe.
- How long do they last?** O-Sox are typically replaced every 3 to 6 months. Various site-specific factors will influence the effective life-time of the O-Sox cartridge; mainly i) constituent type and concentration, and ii) hydrogeological features (groundwater flow rate, Eh, pH, temperature).
- Do I need to install new wells?** No. The O-Sox technology is designed to fit into standard 2-inch and 4-inch diameter groundwater monitoring wells. The canisters have a nominal outside diameter of 1.75 inches for the 2-inch size and 3.5-inches for the 4-inch size.
- What is the oxygen delivery rate?** The rated delivery is at least 15 lb of oxygen per 100 lb of EHC-O, after 200 days.

ORDERING INFORMATION

TR-410	2-in x 3-ft O-SOX (pail with 5 socks*)	31 lb
TR-411	2-in Canister#	1 lb
TR-412	4-in x 3-ft O-SOX (pail with 3 socks*)	31 lb
TR-413	4-in Canister#	2 lb
Accessories:		
TR-416	Nylon-covered stainless-steel suspension cable with swaged cable loop at one end (sold per ft)	
TR-414	2-in Well Cap with Cable Restraint	0.6 lb
TR-415	4-in Well Cap, Cable Restraint	1.2 lb
602528	Pail Opener	0.5 lb

(*) Only sold in pail quantities.

(#) One-time cost: canisters can be re-used for subsequent applications.

Notes:

- Because O-SOX contains an oxidizing substance, it may be shipped only by motor freight.
- O-SOX is non-returnable and non-refundable.

SPECIFICATIONS

Material:

Active compound	EHC-O™ calcium-peroxide based compound. Contains inorganic nutrients and a buffering agent .	
Rated delivery	At least 15 lb of oxygen delivered per 100 lb of EHC-O product after 200 days.	
Sock	non-woven polyethylene fabric, needle punched.	
Canister	Stainless steel, type 304, perforated.	

Dimensions, Weight and Volume

Size for O-SOX sock (dry) and canister

	Sock	Canister
2 in	1.5 in x 36 in approx.	1.75 in x 36 in approx.
4 in	3.0 in x 36 in approx.	3.5 in x 36 in approx.
Canister length*	2 in: 3 ft 4 in	4 in: 3 ft 4 in
	*with suspension loop and link extended	

Total Ship. Volume

Pail	2 ft ³	Note: pail only is 12-in dia. x 16-in H
2-in canister	0.34 ft ³	(4 x 4 x 37 in)
4-in canister	0.77 ft ³	(6 x 6 x 37 in)

Weights

EHC-O (only) content per dry sock:

2-in socks	1.74 lb approximately
4-in socks	7.24 lb approximately

Total Ship. Wt (dry)

Pail w/ five 2-in socks	33 lb
Pail w/ three 4-in socks	33 lb
2-in canister (empty)	2 lb
4-in canister (empty)	3 lb