



# Hydra Bio-Block

Controlled Release of COD / BOD Grease Reducing Bacteria  
For Pump Lift Stations / Sewer Lines / Grease Traps

**Accelerates Breakdown of Organic Material**  
**Increases BOD & COD Removal Efficiency**  
**Prevents Build-up of Grease, Oil & Fat Deposits**



**Hydra Bio-Block** is a solid, bacteria-laden organic block for use in degrading organic waste. The safe, enzyme-producing bacteria (non-pathogenic) are present in sufficiently high numbers to handle difficult organic problems.

The unique **Hydra Bio-Block** will gradually dissolve over a 6-8 week period which allows for continuous treatment of waste in grease traps, sewer lines, lift stations, wet wells, grease traps and other waste water applications where a heavy build-up of grease occurs. The bacteria will begin to work downstream, consuming the grease and fats as they go.

## Features & Advantages

- ✓ Uses natural, safe bacteria to digest and consume grease and FOG's.
- ✓ Contains natural growth enhancers and bio-stimulants to maximize bacterial action.
- ✓ Significantly reduces malodours (Hydrogen Sulphide) and FOG's (fats, oil and grease) deposits.
- ✓ Suitable for all trap sizes.
- ✓ Reduces effluent COD / BOD levels by up to 80%.
- ✓ Treats lift stations, wet wells, and manholes continuously - 24/7.
- ✓ Greatly reduces man hours needed for dosage maintenance.
- ✓ Eliminates need for expensive metering equipment or pump setups for dosing.
- ✓ Bacteria keep working on waste after leaving the lift station.
- ✓ Regular use decreases force main restrictions and WWTP efficiency.
- ✓ Greatly reduces corrosion and wear in pumps and equipment.
- ✓ Excellent for low flow lines or upstream from "Hot Spots"!
- ✓ Keeps floats and equipment grease free.
- ✓ Reduces complaints from public.
- ✓ Easy to use and cost effective, no measuring or waste.
- ✓ Reduces or eliminates malodours, including Hydrogen Sulphide.
- ✓ Last for 6-8 weeks, automates waste water treatment.

## Long Lasting

**Hydra Bio-Blocks** special formulation ensures a slow but steady release of bacteria ensuring that the waste always has the correct dose.



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**Before**

**After**

### **Microbiological Information**

Multiple strains of selected Facultative anaerobes (growth with or without oxygen). All microorganisms are Class 1 ATCC organisms, Non-pathogenic, Spore Forming and Vegetative cells. Certified Salmonella Free. Produces abundant amylase, protease, lipase, cellulose, dioxygenase, and pentosanase primary enzymatic activity. Contains natural nutrients for bio stimulation and growth enhancement.

### **Hydra Bio-Block Sizes**

Available in 500 gram and 4 kilo sizes ensuring the correct size for each application.

## **DOSAGE & APPLICATION RATES**

### **How To Use**

Apply **Hydra Bio Block** directly to area being treated. Do not place the block directly into the flow of incoming sewage. Select a less turbulent area of the grease trap, but not a dead spot. Suspend the block from a rope so that it is always submerged in water, even at the lowest water level.



### **Lift Station / Wet Wells**

Each situation is unique and different. Use 4 kilo **Hydra Bio-Block** per 200-300 cu metre per day of sewage flow. Clean and vacuum lift station before application. Proper degradation of **Hydra Bio-Block** and inoculation of bacteria into the system can occur in low to average flows of 20 - 400 cu metre per day. Check blocks every 2-4 weeks.

When the **Hydra Bio-Block** has degraded by 50-60%, install another **Hydra Bio-Block** to ensure sufficient bacterial dosing. Try to maintain a minimum of 500g to 1 kilo of **Hydra Bio-Blocks** in use at all times per 150 cu metres per day flow for good performance.

Use twice the recommended amount of **Hydra Bio-Block** on initial installation or if you are unable to pre-clean system.

To install:- Attach the block securely to a rope. Once the lift station/wet well has been pumped down to its lowest level, drop **Hydra Bio-Block** into an area of the station that receives good water flow, e.g. near influent flow. Make sure that the **Hydra Bio-Block** is submerged, but **NOT** on the bottom of the well.

Position **Hydra Bio-Block** where it will not entangle with equipment/lines. The block will dissolve gradually over an approximate 4 to 8 week period in the waste water turbulence.

**Feeding into Manholes**

Drop **Hydra Bio-Block** into waste stream. Suspend in sewer line (submerge totally if possible) where maximum amount of sewage will come in contact with **Hydra Bio-Block**. Tie rope from **Hydra Bio-Block** securely so as not to allow it to float downstream. 500g **Hydra Bio-Block** is recommended in small mains or manholes.



**Before**

**After**

**Grease Traps**

Install 500g **Hydra Bio-Block** in grease trap in at least 2 chambers where possible, where incoming flow provides turbulence. Break up any grease mat that may exist. It is always best to have trap pumped prior to treatment. Secure rope firmly.

**Typical Degeneration Flow Rates when using the 4 kg blocks**

| <i>No of cubic metres per day<br/>Flow Rate per day</i> | <i>Daily Flow Rate</i> |
|---|------------------------|
| <i>0-150 cu metres</i>                                  | <i>90 days</i>         |
| <i>1,000 cu metres</i>                                  | <i>60 - 75 days</i>    |
| <i>1,000 – 5,500 cu metres</i>                          | <i>55 – 65 days</i>    |
| <i>5,500 cu metres – 8,000 cu metres</i>                | <i>35 – 55 days</i>    |

Higher flow rates or extended degradation may require multi blocks, i.e. 2 x 4 kilo.

**Instructions**

- 1) Remove **Hydra Bio-Block** from box.
- 2) Suspend **Hydra Bio-Block** from a rope into the area to be treated.
- 3) Change out the spent **Hydra Bio-Block** in favour of the new one when the original is more than 50% used.

**Performance Properties**

Effective pH range .....5.5 - 9.0  
 Effective Temp. range .....40 – 110° F  
 Appearance .....light tan  
 Fragrance .....mild-earthy  
 Shelf-Life ....2 years unopened container

## Material Safety Data Sheet

All the information on this sheet relates to the concentrated product only, in use dilution will decrease any possible hazard significantly.

### Manufacturer

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|  |  |   |
|--|--|---|
| 1. IDENTIFICATION                            | Bio-Block  |   |
| 2. COMPOSITION                               | A powder blend of Bacteria and abundant amylase, protease, lipase, cellulose, dioxygenase, and pentosanase enzymes in a water soluble resin base   |   |
| 3. HAZARDS IDENTIFICATION                    | Persons with known respiratory disorders (eg asthma) should avoid inhalation of the powder.<br>The product contains enzymes so there is a risk of sensitisation reactions in certain susceptible individuals |   |
| 4. FIRST AID MEASURES                        | EYES<br>SKIN<br>INHALATION<br><br>INGESTION  | Flush with copious amounts of water<br>Wash with soap and water<br>In the event of excessive inhalation, remove to fresh air and obtain medical advice.<br>Non-toxic, but if in doubt seek medical advice<br>In the unlikely event of ingestion seek medical aid immediately<br>Give nothing by mouth to an unconscious person<br><br><u>In all cases, if symptoms persist, seek immediate medical advice</u> |
| 5. FIRE HAZARD & FIRE FIGHTING PROCEDURES    | Any extinguishing media may be used but should be appropriate to the cause of the fire. Low degree of risk due to thermal decomposition  |   |
| 6. ACCIDENTAL RELEASE MEASURES               | In the event of accidental spillage, sweep up and wash away remainder with plenty of water   |   |
| 7. HANDLING AND STORAGE                      | Store product in a cold dry place.<br>Prolonged storage in fridge or deep freeze.<br>Protect from light, raised temperature and humidity.  |   |
| 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION | RESPIRATORY PROTECTION<br>VENTILATION<br>PROTECTIVE GLOVES<br>EYE PROTECTION<br><br>OCCUPATIONAL EXPOSURE LIMIT  | Wear respiratory protection to avoid breathing in dust<br>Not applicable<br>Wear PVC or Rubber Gloves as appropriate<br>Wear goggles if task or application method could result in eye contact from accidental splash or spray<br>Not applicable  |
| 9. PHYSICAL AND CHEMICAL PROPERTIES          | PHYSICAL STATE<br>COLOUR<br>ODOUR<br>FLASHPOINT<br>SOLUBILITY<br>SOLUBILITY IN WATER<br>pH VALUE   | Solid Block<br>Pale Tan<br>Slight<br>Non Flammable<br>Water Soluble<br>100 gm/100 ml (at 25°C)<br>4.5-5.5 (10 gm/100 ml at 20°C)  |
| 10. STABILITY & REACTIVITY DATA              | CHEMICAL REACTIVITY<br>STORAGE STABILITY<br><br>HAZARDOUS DECOMPOSITION AND COMBUSTION PRODUCTS  | Not applicable<br>The stability of the bacteria is dependent upon the storage conditions, see Sec.7.<br>All other constituents are stable under normal storage conditions.<br>Not applicable  |
| 11. TOXICOLOGICAL INFORMATION                | EYES<br>SKIN<br>INHALATION<br>INGESTION<br>No toxic effect on the rat (2000 mg/kg)<br>Limit test for acute oral toxicity (Annex V, EEC Commission Directive)   | Irritant<br>Irritant<br>May cause irritation to mouth, throat and digestive tract<br>May cause irritation to mouth, throat and digestive tract  |
| 12. ECOLOGICAL INFORMATION                   | Naturally occurring saprophytic, non hazardous bacteria on readily biodegradable base  |   |
| 13. DISPOSAL CONSIDERATION                   | Flush away with water  |   |
| 14. TRANSPORTATION INFORMATION               | Not dangerous for transport  |   |
| 15. REGULATORY INFORMATION                   | LABELLING INFORMATION  |   |
|  | RISK PHRASES   | None  |
|  | SAFETY PHRASES   | None  |
|  | HAZARD SYMBOL  | None  |
| 16. OTHER INFORMATION                        | 1st Sept 2008  |   |

The information contained in this document is provided in accordance with the requirements of Chemicals (Hazard Information & Packing) Regulations. The product should not be used for any purpose other than as stated on the label without obtaining specific written instructions directly from the supplier's Head Office. As specific conditions of use are outside the supplier's control the user is responsible for ensuring the requirements of relevant legislation are complied with. The user assumes all liability for damage or injury caused from abnormal use, failure to follow recommended practices & any hazard inherent in the nature of the product.