

fuel treatment to combat the diesel bug - suitable for all fuels, especially in marine applications

combat diesel bug - understanding water contamination in fuel and fuel storage tanks

Water can always be found **lying at the base of fuel storage tanks** as a result of condensation: a natural phenomenon.

This happens particularly in warmer climates, and also in cooler climates in summer when **warm conditions provide the perfect breeding ground** for microbial growth - 'diesel bug' - which is found in all types of fuel oils and is exacerbated by the presence of biofuel.

Bacteria in fuel are found at the interface of fuel and water and, if left unchecked, **grow until the entire contents of the tank** are affected.

In time, the bacteria release a by-product closely related to **hydrochloric acid**, with the capacity to **corrode steel and puncture holes** within the fuel tanks, causing leakage and water ingress.

'**Diesel bug**' contamination in fuel adversely affects engine performance; a **brownish-black sludge** clogs up fuel filters, causing **fuel starvation and engine stoppage**.

Droplets of water carried with fuel through injectors and nozzles will cause excessive wear and 'pitting', **reducing the injector's ability** to provide an even spray pattern.

The result of this damage is an **increase in smoking and fuel consumption**.

CYRUS MARINE fuel conditioner and ERADICATE fuel biocide used individually or in combination as required, offer an easy and economical solution to ensuring clean and efficiently operating engines at minimal cost.

CYRUS ENERGY - formulate, manufacture and market a range of technically advanced fuel conditioning products that

- maintain fuel stability
- prevent fuel degradation
- eradicate microbial manifestation
- reduce water contamination
- clean injectors, nozzles and fuel delivery system

for all types of engines, boilers or power generation units running on fuel oil, the above features guarantee;

- increased performance
- improved power output
- reduced maintenance costs
- extended component life
- reduced smoking and environmental impact
- lower emissions output
- reduced fuel consumption

order **CYRUS MARINE and ERADICATE fuel treatments** from authorised Cyrus Energy distributor:

Adrian A Lauder, 3 Kiel Croft, Benderloch, Oban, Argyll, PA37 1QS

tel / fax **+44 (0)1631 720262**

vodafone / text **+44 (0)7720 302727**

email **cyrus.marine@gmail.com**

www.fuel-treatment.co.uk

vat reg no 653 0377 46

CYRUS MARINE - fuel conditioning treatment

water dispersant, injector cleaner and fuel stabiliser inhibits growth of diesel bug

CYRUS MARINE is a highly effective fuel treatment which improves your engine's performance, reducing airborne emissions and fuel consumption

With fuel now the single most expensive factor of operational costs within the marine industry - can you afford not to use it?

KEY PRODUCT FEATURES

- acts as a water dispersant, reducing component wear and protecting injectors and fuel systems from damage caused by water carried in fuel
- disperses water from fuel and in fuel tanks inhibiting growth of diesel bug particularly where fuel is left in long term storage
- cleans and protects injectors
- improves spray pattern and power output
- eliminates smoking and airborne emissions
- allows fuel to burn more efficiently, reducing fuel consumption typically by 5%
- non hazardous : does not contain any abrasive or aggressive chemicals extends component life, reducing maintenance costs

- recommended for use in all marine applications
workboats :: fishing fleets :: ferries :: dredgers :: leisure craft :: and deep sea shipping
- recommended for application to land based machinery
land tugs :: generators :: cranes

CYRUS MARINE fuel conditioner	VOLUME	TREAT UP TO	PRICE INC VAT* *delivery charged extra
	1 litre	2,000 litres	£25.74
5 litres	10,000 litres	£55.23	

APPLICATION RATE

1:2000 add **1ml to 2 litres of fuel; 1 litre treats up to 2000 litres of fuel**

- mixes easily with fuel and does not contain any abrasive or aggressive chemicals that may damage components
- suitable for application to petrol/bio-ethanol and diesel/biofuel combinations
- apply on an ongoing basis to maintain a clean and efficient fuel system
- protect storage tanks against water contamination and diesel fuel bug - CYRUS MARINE is a preventative conditioner which inhibits the formation and growth of 'diesel bug' contamination
- Where contamination of fuel is suspected or known, use in conjunction with ERADICATE fuel biocide until all contamination is cleared.

CYRUS MARINE is available in 1 litre, 5 litres, 25 litres and 205 litres quantities

ERADICATE - fuel biocide

destroys diesel bug microbiological contamination

use where **fuel is contaminated with diesel bug**

in fuel oil :: in fuel storage tanks :: in bilges :: in fuel distribution systems

Unless adequately protected in storage **fuel is prone to deterioration** which can lead to surface growth and **sludge deposits** -this is what's commonly known as '**diesel bug**'

THE SYMPTOMS

- **blockages of filters, clogged pump lines and carburettors** caused by **brown or brown/black slime wrapped around the fuel filters**
- increased regularity of fuel filter change
- odour from fuel
- poor engine performance

THE SOLUTION

- **Cyrus ERADICATE Biocide rapidly destroys microbial growth** in fuel and storage tanks within 48 hours
- 1 part ERADICATE to 2000 parts fuel is sufficient to remove contamination
- severe cases of contamination may require further treatment
- regular follow-up doses of CYRUS MARINE Fuel Treatment are recommended to disperse water and inhibit fuel from further recurrences of "bug".

ERADICATE fuel biocide	VOLUME	TREAT UP TO	PRICE INC VAT* *delivery charged extra
	1 litre	2,000 litres	£58.75
5 litres	10,000 litres	£244.40	

APPLICATION RATE - varies but as a guide

- **1:2000** add **1ml to 2 litres of fuel; 1 litre treats up to 2000 litres of contaminated fuel**
- **1:1000** add **1ml to 1 litre of fuel; 1 litre treats up to 1000 litres of heavily contaminated fuel**

ERADICATE fuel biocide is available in 1 litre, 25 litres and 25 litres quantities

how to use ERADICATE fuel biocide

- **for storage facilities where fuel can be drained from its storage tank**
drain fuel, clear and discard all sludge-like contaminated material, and thoroughly clean entire fuel supply system - tanks and all fittings, filters, fillers, caps, air breathers, pipes etc as best possible, and re-assemble.
Add ERADICATE directly to fuel and re-fill containers as full as possible. Any residual contamination will be destroyed by ERADICATE, so check and clear filters etc regularly until the fuel is clear of all contamination.
- **where fuel is in use and / or cannot be drained from its storage tank**
Drain and remove fuel filters, discard contaminated contents, clean thoroughly and replace with new element.
Add ERADICATE directly to fuel and re-fill tanks as full as possible.
ERADICATE will destroy the contamination; but check, drain and change filters often and repeatedly until the fuel is clear of all contamination - which may take time some depending on the severity of the problem.

ERADICATE destroys 'the diesel bug' found in fuel oil, fuel storage tanks, bilges and fuel distribution systems.

NB It does not remove dead material which will necessitate regular clearing of fuel filters until the fuel is clear of all contamination.

It's not uncommon for re-contamination to occur during refilling of fuel and storage tanks - so check and test your fuel supply regularly! - and to pre-empt any potential problems, add ERADICATE to fuel on a preventive basis for prolonged protection. CYRUS MARINE and ERADICATE can be used together until the diesel bug is cleared from contaminated systems, thereafter CYRUS MARINE can successfully be used on its own as a preventative conditioner.

fuel treatment order form
CYRUS MARINE fuel conditioner ERADICATE fuel biocide

order from

delivery address

post code

tel / fax

mobile

email

quantity	description	unit size	<i>unit price ex. VAT</i>	<i>unit price inc. VAT</i>	£ total inc. VAT
	CYRUS MARINE	1 litre	£21.90	£25.74	
	CYRUS MARINE	5 litres	£47.00	£55.23	
	ERADICATE	1 litre	£50.00	£58.75	
	ERADICATE	5 litres	£208.00	£244.40	

for bulk order quantities, please contact us direct for a quotation

UK delivery charges - no charge if collected		
order description	delivery inc. VAT	
1x 1 litre unit	£6.00	
2 x 1 litre units	£8.00	
3 x 1 litre units	£9.00	
4 x 1 litre units	£11.00	
5 litre unit	£11.00	
1 x 5 litre unit + 1 x 1 litre unit	£12.50	
1 x 5 litre unit + 2 x 1 litre units	£14.00	
1 x 5 litre unit + 3 x 1 litre units	£14.50	
1 x 5 litre unit + 4 x 1 litre units	£15.00	
2 x 5 litre units	£16.00	
order total		
<i>for other quantities and bulk order delivery - please contact us for quotation</i>		

e&oe

Goods despatched on receipt of cheque

Send completed order form with cheque made out to 'Mr A Lauder' to address below:

Adrian A Lauder, 3 Kiel Croft, Benderloch, By Oban, Argyll, PA37 1QS

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