Econofree A

The fuel additive for heavy oil, diesel oil and gas oil

Effective for combustion improvement and smoke suppression further saving fuel consumption

A diesel engines can be operated in good combustion under normal operating condition. However at the time of starting, in low load or under fluctuated load in high and low, diesel engine gets unstable combustion and generates much smoke even if they are operated by distillate oils. In the end, the undesirable condition causes the diesel engines to perform poorly by a large amount of carbon deposit in the engines and exhaust gas lines. In such a case, combustion will be improved with "Econofree A" to the fuel.

"Econofree A" suppresses the smoke and keeps the diesel engine clean. Then the fuel oil consumption (FOC) can be saved by the combustion improvement. The saving FOC caused by using fuel additive will contributes to the suppression of greenhouse gas emission, and will be save enable to the cost.

■Onboard Smoke test

Test for Marine Diesel Oil

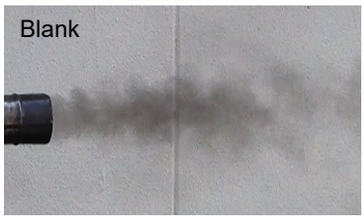
(Sulfur content is more than 50ppm)





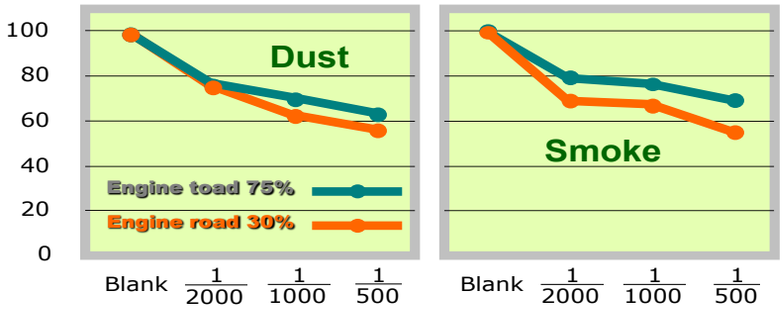
Test for Onshore Gas Oil

(Sulfur content is less than 10ppm)



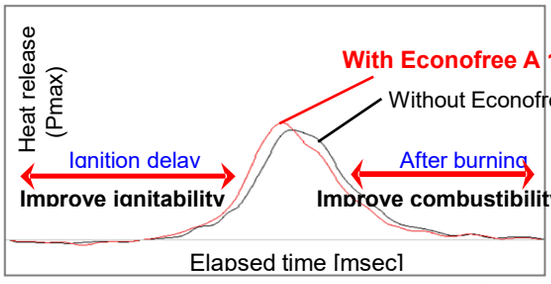


■Onshore Engine test



■FIA･FCA test

(Ignition and combustion quality test)

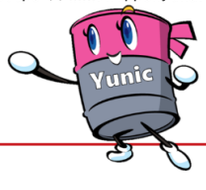


(Please read the next page.)

NIPPON YUKA KOGYO CO., LTD.

Head Office： TEL： (+81)-45-201-8867 / FAX： (+81)-45-201-8358
Kobe Branch： TEL： (+81)-78-321-4105 / FAX： (+81)-78-321-4107

←You can contact us here!
(https://www.nipponyuka.jp/)



2023.08

Direction for Use

- Heavy oil, Diesel oil and Gas oil

  Sulfur content is more than or equal to 50 ppm (0.005%): The standard dosing ratio is 1/1000.

  Sulfur content is less than 50 ppm (0.005%): The standard dosing ratio is 1/2000.

- Econofree A is poured into empty tank before bunkering as usual.

Cautions for Use

- **Observe the standard dosing ratio accordance with the above direction for use.**
- In case a lot of water contains into fuel oil, it will be possible to generate sludges due to separate of active subs in the fuel additive. In that case, remove water into fuel oil well by drain off at settling tank etc.
- Flammable liquid, keep from open flames.
- Wear respirator, goggles and resistant rubber gloves.
- First-aid procedure:
  - ・If splashed into eyes, flash with plenty clean water longer than 15 minutes.
  - ・In case of skin contact, wash with soap and fresh water and apply skin cream.
  - ・It is harmful if swallowed. Don't put it into a mouth.
  - ・If inhaled vapor, move to fresh air area and warm body.

    ※ Submit to medical treatment according to the condition.

Cautions for Storage

- Keep from open flames.
- Store in cool and dark space.

Characteristics

- Appearance : Dark brown transparency liquid
- Viscosity : 3.4 mm^2/s @50℃
- Density : 0.90 g/cm3 （@15℃）
- Flash point : 80±4℃ （TAG）
- Ingredient : Oil soluble metal salt、Surfactant、Petroleum solvent

Container

	Wight,kg	Size, (WxDxH,cm)
●200 L drum	197.6	φ58.5x89
●18 Litter can	17.0	23.8 x 23.8 x 35





2023.08