

**ZYCRYL - 15****[ A New Generation Additive for Improving Fuel Efficiency]**

**ZYCRYL-15** (patented) improves fuel efficiency of Furnace Oil (F.O.) / Light Diesel Oil (L.D.O.) by 10-15% by addition 4 % water with it, using low-pressure emulsification technique.

**Atomization process of FO/ LDO**

A typical burner atomizer produces a spray of fuel droplets of 100 to 200 microns, (depending on the fuel quality, temperature & atomizer design). Typically, the larger fuel droplets do not burn completely; leave un-burnt carbon and get deposited on heat transfer surfaces. These carbon particles escape as particulate matter in exhaust gases. Poor quality burning also leads to higher percentage of CO in flue gases. This in turn reduces overall thermal efficiency.

**The ZYCRYL-15 Advantages**

The fuel droplets are further divided as a result of the explosive vaporization caused by rapid heating of the water droplet dispersed within the individual fuel droplet. The vaporization of water, in turn, produces a rapid expansion of the surrounding F.O., fragmenting the F.O. into a vast number of smaller fuel droplets, helping in improved combustion of F.O./ L.D.O.

<b>Features</b>	<b>Benefits</b>
<b>Less air requirement</b>	Reduced SO <sub>3</sub> Concentration
<b>Short flame</b>	Larger Radiant Cooling Zone
<b>Increased CO<sub>2</sub> Concentration</b>	Less Carbon & CO generation
<b>Elimination of fire side additive</b>	Increased Thermal Efficiency @ reduced cost
<b>Fuel consumption is Reduced</b>	Fuel Consumption Efficiency improved by 10 to 15%

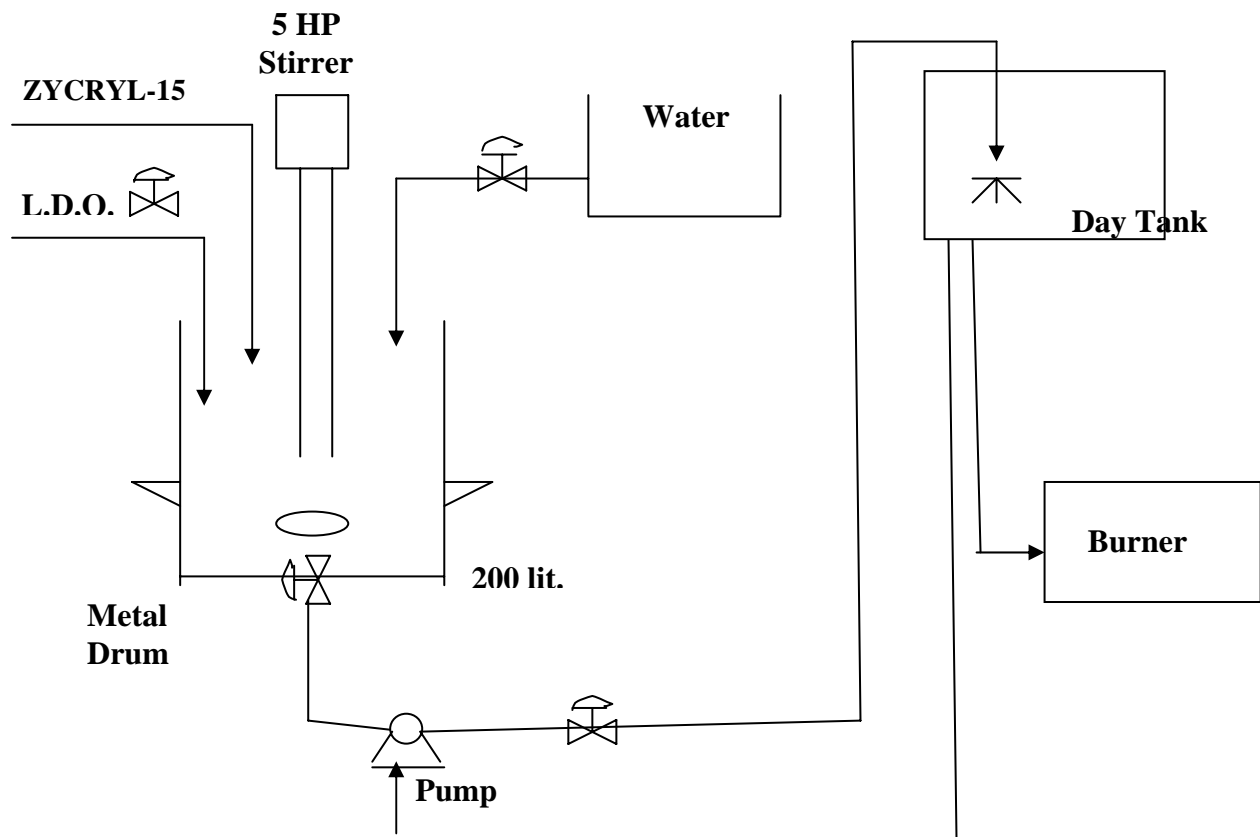
## Specifications:

Appearance : Pale yellow liquid at 25°C  
pH : Neutral  
Active Content : 98 ± 2 %

## Recipe for 100Kg Emulsion:

INGREDIENTS	WT IN (KG)
L.D.O	18
ZYCRYL-15	2
Water	80
<b>Total</b>	<b>100</b>

## P & I Diagram for Emulsion Preparation:





## **Application:**

Mix 5% of above prepared emulsion with regular FO/ LDO in day tank and stir moderately for 10 - 15 minutes to ensure homogeneous mixing of emulsion.

## **Storage:**

- Zycryl-15 is very easy to handle, normal departmental procedures should be followed.
- It should be stored at ambient temperature.
- The product has a shelf life of 6 months.

## **Disclaimer:**

*The information & data contained herein are given in good faith but without warranty. We recommend that before using our products, the customer should make his/her own tests to determine the suitability of the products for his/her own purpose under his/her operating conditions. As the circumstances under which our products are stored, handled and used are beyond our control, we cannot assume any responsibility for their use by the customers.*

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