



## CORROSION INHIBITING ADDITIVES



# M-645



### PRODUCT DESCRIPTION

M-645 is a newly developed corrosion inhibitor additive for corrosion induced by seawater or brine. M-645 is a highly surface active concentrate, which will displace water containing chlorides from the metal surface. Then it is adsorbed forming an oily protective film on the metal. This film is the most uniform when it is applied in conjunction with an oxygen scavenger.

One of the biggest advantages of using M-645 as an additive to seawater is that the discharged water contains a much lower concentration of M-645 than originally added due to the adsorption of the protective oily film on the metal surface. M-645 provides long term protection.

M-645 is extremely economical in its application in comparison with traditionally utilized inhibitors. M-645 also protects metal from atmospheric corrosion when added to an oil carrier or applied directly to the metal surface.

### FEATURES

- Provides multimetal protection from atmospheric corrosion
- Effective for a broad range of applications to stop aggressive corrosion from fresh and saltwater, brine, chlorides, and other dissolved halogens
- Biodegradable, environmentally friendly, and nitrite/amine-free
- Generally safe for discharge in seawater at recommended concentration
- Provides economical treatment
- Not affected by pH range and salt concentration levels
- Compatible with majority of metal and vegetable oils

### TYPICAL APPLICATIONS

- Ballast tanks containing seawater
- Hydrotesting of pipelines / vessels

### METHOD OF APPLICATION

- General surface treatment - spray, dip, or brush surfaces to be protected at a rate of 600 ft<sup>2</sup>/gal - 900ft<sup>2</sup>/gal (14.7-22 m<sup>2</sup>/L)
- Recommended to be used with an oxygen scavenger during long term storage

### EXAMPLE OF INSTALLATION FOR PROTECTION OF BALLAST TANKS

Pump down after pressure washing and removing all foreign materials from the bottom. Use 600-900 sq. ft. per gallon (14.7-22 m<sup>2</sup>/L) of M-645 concentrate as a basis to get the required amount. Pump the required amount of M-645 into the tank and fill with water. This will float the M-645, coating every square inch of the tank's interior including ring stiffeners, girders, piping, and side shell with a sufficient amount of product to protect against corrosion. Now that the tank is protected the water may be pumped to the normal ballasted level.



## TYPICAL PROPERTIES

|                      |  |
|----------------------|--|
| Appearance           | Clear brown to amber liquid                              |
| Non-volatile content | 83-88%   |
| Removal Method       | Petro Solvents / Alkaline cleaners<br>(VpCl-414/416/419) |
| Density              | 7.5-7.7 lb/gal (0.90-0.92 kg/l)                          |

## PACKAGING AND STORAGE

M-645 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) metal drums, liquid totes, and bulk.

## FOR INDUSTRIAL USE ONLY

**KEEP OUT OF REACH OF CHILDREN**

**KEEP CONTAINER TIGHTLY CLOSED**

**NOT FOR INTERNAL CONSUMPTION**

**CONSULT MATERIAL SAFETY DATA SHEET FOR  
MORE INFORMATION**

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