



VpCI® ADDITIVES FOR WATER TREATMENT



# M-640 Powder



## PRODUCT DESCRIPTION

M-640 is a corrosion inhibiting additive for water and glycol-based heat exchange fluids. It protects ferrous and non-ferrous metals from corrosive contaminants. This product is an excellent replacement for phosphate/nitrite-based/amine compounds. M-640 is based on an organic-inorganic formulation designed for low level concentrations in field applications. M-640 contains a unique combination of contact and vapor phase corrosion inhibitors that provides corrosion protection even in partially filled spaces.

## FEATURES

- Protects ferrous and non-ferrous metals from corrosion and pitting
- Nitrite, chromate, and heavy metal free
- Contains contact and vapor phase corrosion inhibitors
- Economical
- Use in low dosages
- Environmentally acceptable

## PHYSICAL PROPERTIES

Appearance White powder  
 pH 11.5-12.8 (1% solution)  
 Non-volatile Content 99.5-100%

## TEST DATA

ASTM D-1384-87 (Standard Test Method for Engine Coolant in Glassware) for engine antifreeze/coolants treated with M-640:

### Weight Loss per Specimen (mg)

Additive	Copper	Brass	Solder
0.5% M-640	6-9	1-2	8-9
ASTM D-3306 Requirements	≤10	≤10	≤30
GM 1899 M Requirements	≤10	≤10	≤20
GM 1825 M Requirements	≤10	≤10	≤20

Additive	Carbon Steel	Cast Iron	Aluminum
0.5% M-640	1-2	4-6	1-2
ASTM D-3306 Requirements	10	10	30
GM 1899 M Requirements	10	10	20
GM 1825 M Requirements	10	20	??

## TYPICAL APPLICATIONS

M-640 is an additive for antifreeze/coolant fluids to replace nitrites, phosphates, amines, and other types of restricted corrosion inhibitors.

The final concentration range for M-640 under operating conditions is 0.5-0.8% by weight.

## PACKAGING AND STORAGE

M-640 is available in 100 pound (45 kg) polyethylene lined drums. Store in a sealed container in a dry warehouse, avoiding direct exposure to sunlight, with temperatures not exceeding 150°F (66°C). Under these conditions, shelf life is up to 24 months.



**FOR INDUSTRIAL USE ONLY**  
**KEEP OUT OF REACH OF CHILDREN**  
**KEEP CONTAINER TIGHTLY CLOSED**  
**NOT FOR INTERNAL CONSUMPTION**  
**CONSULT SAFETY DATA SHEET FOR MORE**  
**INFORMATION**

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