

# GF ACID CLEAN 9011L

## ACIDIC CLEANER

### Description

**GF ACID CLEAN 9011L** is an organic acidic liquid compound for removing rust, corrosion and scale from ferrous metals. **GF ACID CLEAN 9011L** dissolves oxidation and corrosion products from ferrous and non-ferrous metals.

**GF ACID CLEAN 9011L** removes mill scale - water hardened scale - mineral scales - welding scales - heat treating scales.

**GF ACID CLEAN 9011L** is also recommended for descaling water side of heat exchangers (especially suited for stainless steel where harsh hydrochloric or sulfuric based materials are not recommended) and water lines. It can also be used to remove rust from oil pipe lines and storage equipment.

### Features

- Economical
- Versatile Application
- Fast acting and economical to use, may be used hot or cold
- Apply by recirculating spray or dip

### Directions for Use

**GF ACID CLEAN 9011L** is used at a dilution ranging from 1 to 4 parts water to 1 to 10 parts water, depending upon the amount of rust, scale or corrosion to be removed and available process cycle time. Operating temperature and contact time is dependent upon the degree of scale to be removed (ambient-140°F). Solution containers: Use stainless steel, rubber-lined steel tanks or acid-resistant brick or polyethylene or polypropylene tanks as immersion equipment.

**Rust and scale removal:** It is recommended that the following steps be taken.

1. Immerse parts in **GF ACID CLEAN 9011L** solution.
2. Note carefully the progress of rust and/or scale removal.
3. Remove pieces from solution as soon as all traces of deposits have been removed.
4. Follow with a rinse in cold running water or pressure spray to displace loosened material. The surface of the descaled metal should be neutralized or rust inhibited to prevent continued

chemical activity. Weldments that are treated should be assessed for effects associated with prolonged acidic exposure (hydrogen embrittlement).

**Stainless Passivation:** Stainless work must first be cleaned before passivation. Use 13.3% to 33.3 by volume of **GF ACID CLEAN 9011L** and soak the cleaned work for times indicated for the temperature ranges shown below.  
140F to 160 F; soak for at least 4 min.  
120F to 139F; soak for at least 10 min.  
70F to 119F; soak for at least 20 min.

### Titration Procedure

#### Buret Method

1. Take a 10 milliliter sample into a beaker or flask.
2. Add 2-3 drops of phenolphthalein indicator.
3. Titrate volumetrically with 1.0N Sodium Hydroxide, until the color changes to pink. Record the number of milliliters.

**Percent by Volume GF ACID CLEAN 9011L =**  
**milliliters x 0.336**

### Safe Handling and Storage Instructions

Before handling and using **GF ACID CLEAN 9011L**, the Material Safety Data Sheet should be read and understood by all personnel in contact with this product. General indoor storage at temperatures above freezing are recommended for the storage of **GF ACID CLEAN 9011L**. Keep containers tightly closed when not in use.

### Disposal

Any disposal of this product should be in compliance with all federal, state and local regulations.

### Precautions

KEEP OUT OF THE REACH OF CHILDREN.

Please refer to the label and Safety Data Sheet information for all warnings, recommendation for safety equipment, and other regulatory information. Copies of the Safety Data Sheet information can be ordered by calling 800 438 2647.

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