



# WATER MANAGEMENT DIVISION

## CHEMICAL TECHNOLOGIES GROUP

*Ar*

### GEO-GUARD® 2215

NON-CHELATED  
MULTI-METAL CLEANER

#### DESCRIPTION

GEO-GUARD® 2215 is a liquid, low foam, low temperature, non-chelated alkaline cleaner designed for use in recirculating spray washers or immersion cleaning systems. GEO-GUARD® 2215 is an excellent cleaner for especially tough soils such as lapping compounds, heavy grease and drawing compounds. Absence of chelants simplifies separation of metal ions from cleaning solutions. It is safe for use on all metal surfaces.

#### FEATURES

Non-chelated  
High Cleaning Efficiency  
Multi-metal Capability

#### BENEFITS

Simple separation of metals by usual methods  
No sacrifice of cleaning ability  
Will not harm aluminum, zinc, or other metals

#### PHYSICAL PROPERTIES

103

Form .....	Light yellow/clear liquid
Odor .....	Detergent
Specific Gravity .....	1.13
Pounds/Gallons .....	9.4
pH - 1% Solution .....	11.5
Solubility .....	Complete
Foam .....	Very low
Rinsing .....	Excellent
Phosphate Free .....	Yes
Biodegradable .....	Yes
Chelants .....	No

*1.11  
2.1  
101  
8.68  
0.01*

1H89-300-293

### DIRECTIONS FOR USE

GEO-GUARD® 2215 is designed to be low foaming at all temperatures. Operating temperatures should not exceed 160°F.

Operating concentrations of GEO-GUARD® 2215 run from 1% to 100% by volume and depend on temperatures, soil loads and cleaning equipment used. The typical use concentration is 2-4 % by volume. Your Calgon representative will help you establish the optimum operating criteria for your application.

GEO-GUARD® 2215 should be titrated at least once per shift and additions should be made to maintain prescribed solution strength.

### TITRATION

Use test kit C-108 and one small vial (10cc) sample with Indicator A and Acid 10.

In some areas, the tap water used for preparing the detergent solution may be sufficiently alkaline to affect results. Run a blank titration using the tap water as the sample. Subtract the number of drops for the blank from the number of drops for a sample to obtain the corrected result (example: a sample titration was 8 drops and the blank titration was 1 drop. The corrected result is  $8-1=7$ ).

#### % by Volume

1  
2  
3  
4  
5

#### Drops Acid 10

1  
2  
4  
5  
6

### SERVICE

#### Routine

Service is one of the most important insurances for consistent quality performance of your operation. A Calgon Market Specialist will tailor a service program for your facility that will provide effective and trouble-free operations.

#### Technical Support

Calgon is pleased to provide a completely staffed and equipped Technical Service laboratory capable of performing needed tests and providing both telephone and on-site assistance when needed. Your Calgon Vestal Market Specialist will provide you with details on how this service can benefit your particular situation.

**PRECAUTIONS**

Information concerning human and environmental exposure may be reviewed on the Material Safety Data Sheet for the product. For additional information regarding incidents involving human and environmental exposure call (314) 535-1810 and ask for the Regulatory and Trade Affairs Department.