



# TECHNICAL DATA SHEET

## GRODAL CLEAN 200(M)

ALKALINE GENERAL PURPOSE CLEANER

### DESCRIPTION

GRODAL CLEAN 200(M) is a multipurpose alkaline cleaner designed for cleaning of Steel and Copper alloys. It rapidly wets metal surfaces and displaces oils, greases and shop soils, leaving the work clean and ready for further processing. GRODAL CLEAN 200(M) can be used as a cleaner prior to remove oxidised, oil after pilgering process or for general cleaning process. It is specially made for this application in pipe industry. GRODAL CLEAN 200(M) is moderate by alkaline and high by detergency, thereby it produces excellent cleaning over a wide temperature range. GRODAL CLEAN 200(M) displaces oils minimum emulsifying them. Oils removed from work pieces float to the surface where they are readily skimmed off. The cleaning solution thus does not get contaminated with oil and has very long life.

### OPERATING CONDITIONS

		Soak
Concentration	:	80 -100 g/l
Temperature	:	50 -70°C
Time	:	15 - 30 min.
Agitation	:	Ultrasonic-optional for better result

- **Note – Concentration can be increased up to 150 g/l, if heavy oil contamination on parts/pipes.**

### MAKE - UP

Fill a steel tank with approximately 2/3rd full of water. Add the required amount of GRODAL CLEAN 200(M) and stir until all the material is dissolved. Top-up with water to working level and heat to operating temperature.

### EQUIPMENT

GRODAL CLEAN 200(M) solutions may be contained in plain steel tanks and heated by means of a steel steam coil or by electric immersion heater. An overflow partition and an oil trap are advisable for keeping the surface of the cleaner free of oil. An exhaust is recommended.

### ANALYTICAL CONTROL

Pipette out 10ml of working bath solution in 500 ml conical flask.

Add approx. 100ml distilled water, phenolphthalein indicator; titrate against 1 N sulphuric acid from pink to colourless end point.

### CALCULATION

Reading x 11.5 = gm/l of GRODAL CLEAN 200(M)

### CAUTION

GRODAL CLEAN 200(M) is alkaline in nature and contact of the salts or solution, with the skin or eyes should be avoided.

For more details refer MSDS.

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