

## Product Data Sheet

VERSAFLOC LHD + is a "universal flocculant" which aids in solids removal in wellbore displacements and completion fluid reclamation operations. VERSAFLOC LHD+ helps to clean up the workstring, casing, riser, and surface equipment by flocculating oil-wet and water-wet solids in completion fluid, seawater, and produced water.

### VERSAFLOC LHD+ Physical Properties

Appearance	Colorless, Clear Liquid
Odor	Mild
Specific Gravity @ 60°F Density (lbs / gallon) Flash Point	1.235 g/ml 62.9 lb/ft <sup>3</sup> NA
pH	8 - 9

### Applications

VERSAFLOC LHD+ can be used to help flocculate oil-wet and water-wet solids in seawater, fresh water, produced water, and brines of any weight and composition.

Please consult a RIG-CHEM representative for specific concentrations of product as each displacement is specifically tailored per well.

### Advantages

VERSAFLOC LHD + use yields cleaner completion fluids quicker. VERSAFLOC LHD+ removes oil and grease from fine solids, oily mud cakes that adhere to casing walls, and coagulates and flocculates emulsions.

VERSAFLOC LHD + use reduces the possibility of formation damage due to solids in completion fluid.

Is not damaging to painted surfaces and equipment

### Environmental Data

VERSAFLOC LHD+ is non-toxic and non-bio accumulative

VERSAFLOC LHD+ passes LC-50 testing

When used as directed and tested according to the U.S. Environmental Protection Agency's Static Sheen Test, VERSAFLOC LHD+ does not form or create a sheen on the surface of receiving waters.

### Directions

VERSAFLOC LHD+ is usually used concentrations between 3-5% by volume; however, each job is designed differently and a RIG-CHEM representative should be consulted for exact amount and usage.

### Handling

Improper handling of this chemical or any other chemical deemed as an "industrial chemical" can be injurious to workers. Observe all safety precautions shown and labeled in the Safety Data Sheets.